What Can Rational Choice Theory Add to the Study of Australian Politics?

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This work contains no material which has been accepted for the award of any other degree or diploma in any university and, to the best of my knowledge and belief, this thesis contains no material previously published or written by another person, except where due reference is made in the text of the thesis.

Signed.....Nicole Mitchell.....

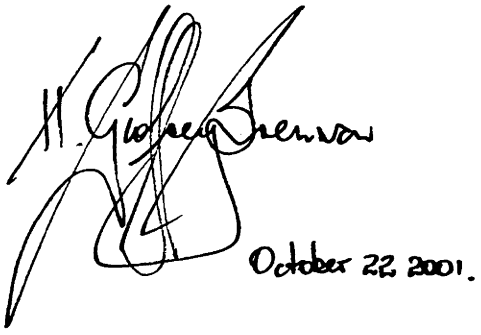
Nicole Mitchell

Date.....30 October 2001.....

Note: Parts of this thesis have previously been published. Specifically, the substance of chapter 3 is published in Brennan and Mitchell (1999) and the substance of chapter 5 in Mitchell (2002) forthcoming.

Statement concerning Nicole Mitchell's Thesis

Chapter Three of the attached thesis is a somewhat modified version of Geoffrey Brennan & Nicole Mitchell: "The Logic of Spatial Politics: The 1998 Queensland Election", *Australian Journal of Political Science* **34**,No. 3, p379-390.
I hereby certify that Nicole's contribution to that article was full and equal. The article represents truly joint work: Nicole and I are both jointly and severally responsible for its contents.



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ABSTRACT

This thesis is motivated by a single question – what can rational choice theory add to the study of Australian politics? Because the theory has had a relatively small impact on Australian political science, this question is necessarily in the present, rather than past, tense. That is, the thesis asks what can, what does or what might the theory add, rather than what has it added.

The thesis addresses this question in two stages. The first two chapters outline and respond to a range of existing criticisms of the approach. In this way, the early chapters establish that rational choice theory warrants further consideration in Australian political science. The main focus of the thesis, however, is an attempt to show, by example, the types of insights that rational choice theory might provide to the study of Australian politics. As such, the thesis uses rational choice concepts and logic to examine the rise of One Nation at the 1998 Queensland state election, the 1999 Republic Referendum and the process of policy negotiation between the Australian Senate and House of Representatives. While the focus of each of these chapters is quite different, together they provide an insight into the benefits, limitations and lessons associated with the use of an otherwise largely untested theory in the study of Australia politics.

CONTENTS

INTRODUCTION

The growth of rational choice theory in American political science is readily apparent. Articles in prestigious journals like *The American Journal of Political Science* and *American Political Science Review*, academic positions at notable universities and panels at major disciplinary conferences all attest to its presence in the discipline (Green and Shapiro 1994, 2).[1] Rational choice theory's presence in the United Kingdom is of a lesser order, but is still evident in British textbooks, panels at Political Science Association Meetings and the *British Journal of Political Science*. The situation in Australia and New Zealand is distinctly different. There are no Australasian equivalents of the European and American Public Choice Societies or their journals, no rational choice panels at Australasian Political Science Association Meetings and few articles inspired by rational choice theory in the *Australian Journal of Political Science*.

Admittedly, some of the most strident criticisms of rational choice theory and its impact on both the theory and practice of politics originate in Australia. One line of criticism argues that public sector reforms in Australia are supported by rational choice theory in the same way that Virginian and Chicago School ideas underpinned government reforms in the US and UK during the 1980s (Stretton and Orchard 1994, 2). In contrast to the US and UK, however, Australian critics of rational choice theory emphasise the role of Australian economics departments, rather than political science departments, in the transmission of rational choice ideas from theory to public policy (Pusey 1991, 59-64). As such, while there is debate over the impact of rational choice theory more generally, there is little debate over the theory's role in the discipline of Australian political science.

Rational choice theory's Australian reception impacts on the current inquiry in four different ways. First, whereas an American studying this field could readily

[1] This comment is not intended to reflect on rational choice theory's position in the US vis-à-vis alternative approaches in political science.

answer 'what has rational choice theory added to the study of American politics?' this question is not feasible here because of the theory's small impact on Australian political science.

Second, while rational choice theory's contrasting reception worldwide provides the background and motivation for the current study, this thesis does not attempt to examine why rational choice theory has such a divergent status across the world. A sociological study that examined how these or other ideas are transferred within academic disciplines and across state boundaries would be interesting, but it would require substantially different questions and tools to those utilised here.

Third, and on a related point, because of rational choice theory's mixed reception in Australia, I am cautious that readers will either have little exposure to the theory or will associate rational choice theory with the ambiguous phenomena described as 'economic rationalism'. This thesis does not engage in the debate over economic rationalism, but it is clear from introductory chapters that rational choice theory has a distinctly different agenda to that attributed to economic rationalism.[2]

Fourth, rational choice theory's limited impact on Australian political science ensures that this thesis will be addressed to two different audiences - Australian political scientists with an interest in new theoretical approaches and rational choice theorists interested in the practice of Australian politics. Because of the distinct concerns of these disciplines, it is sometimes necessary to address questions that play a significant role in one academic field, but a limited, or no, role in the other. Where this is necessary, I have attempted to flag in the text that this is the case.

[2] See James, Jones and Norton (eds 1993) for arguments in defence of economic rationalism and King and Lloyd (eds 1993) and Kukathas (1993) for a broader discussion of the issues involved.

Research Question

The primary question is this thesis is; what can rational choice theory add to the study of Australian politics? The thesis answers this question by engaging in two quite separate enterprises. Firstly, chapters 1 and 2 explicitly investigate the costs and benefits, as highlighted by critics and practitioners, of rational choice theory. This exploration involves an account of the major findings from rational choice theory, including recent developments, and an assessment of criticisms directed against the approach.

The second enterprise consists of more narrowly focused studies of three topics of contemporary interest in Australian politics. These topics are: the 1998 Queensland state election and the rise of One Nation; the possibility of a preference cycle at the 1999 Republic Referendum and; the process of policy bargaining between the Australian Senate and House of Representatives. While these chapters are intended to stand alone as examinations of topics of interest, they do follow a common form. Each chapter starts by surveying the existing literature in Australian political science and by briefly describing one or two key concepts from rational choice theory. Subsequent sections then make use of these concepts and models to further investigate the topic. All three chapters end with a series of speculative remarks and an assessment of rational choice theory's contribution to the understanding of the topic.

These exploratory chapters serve five purposes. Most obviously, they show by example the types of insights that might be gained through the increased use of rational choice theory in the study of Australian politics. Some of these results are quite striking, in the sense that they produce novel explanations of familiar phenomena. Second, the chapters provide a forum to further explore and respond to general criticisms raised against rational choice theory. Third, because these chapters introduce rational choice theory to Australian politics, they inevitably raise new questions about existing scholarship on each topic. As such, chapters 3, 4 and 5 develop areas for engagement between rational choice theory and Australian politics specialists.

Fourth, these chapters also serve a broader purpose than simply highlighting potential areas of engagement. That is, they provide some assistance in determining when and where rational choice approaches might be most profitable in the study of Australian politics. While it is beyond the scope of this work to establish at a meta-level where the theory is most successful, these chapters do provide scope for an assessment of the limitations and successes of the approach in studying these particular topics.

This goal is assisted by an attempt to carefully set out the underlying assumptions used in both the general chapters and the specific studies. Where these assumptions are readily justified, a defense is provided in the text. Where the assumption is not readily justified or assessment is an empirical matter, discussion is left to the end of the chapter. The conclusions of these chapters thus assess the value of the insights associated with particular models and the limitations of assumptions. The chapters also specify, where appropriate, the type of empirical work that would be best placed to test these models.

Fifth, while asking what rational choice theory can add to the study of Australian politics, this thesis also provides examples of the type of contributions that the study of Australian politics might make to rational choice theory. That an understanding of Australian political practice might improve rational choice accounts is particularly clear in discussions of rational choice concerns with policy stability and cycling, raised in chapters 4 and 5.

There is one further common characteristic of these explanatory chapters that warrants mention. Each of these chapters develops a model of political phenomena that consists of a series of 'if then' statements. Because of this structure, the conclusions of these models, and of rational choice theory more generally, are always limited by the realism of their underlying assumptions. Despite this limitation, simplistic models may be valuable as a means to clarify the logic of particular arguments or as the source of more sophisticated adaptations and alterations. This point is important. The development of rational choice theory proceeds through the introduction of increasingly sophisticated and

realistic models. As such, caution warns against the rejection of models on the basis that they are simplistic. The use of models by rational choice practitioners also means that it is important, in assessing the theory, to make a distinction between particular rational choice models and the approach as a whole. While different models are connected by shared assumptions and goals, the failure of a particular model should not be taken as evidence of the theory's general failure.

This argument is developed further in response to Green and Shapiro's (1994, 1996) criticisms. The bulk of Green and Shapiro's arguments are discussed in chapter 2. For the moment, however, it is useful to outline their primary criticism, so as to clarify the ways in which it impacts on arguments in this thesis. In short, Green and Shapiro charge rational choice theorists with engaging in theory-driven, rather than problem-driven research. Implicit in this line of criticism is the accusation that rational choice theorists are more concerned to highlight the usefulness of their approach than to provide good explanations about politics.

This line of criticism also applies to this thesis because the thesis asks 'what can rational choice theory add to the study of the 1998 Queensland state election, the 1999 Republic Referendum and the Australian Parliament?' rather than 'what is the best approach available to study these phenomena?' While Green and Shapiro's criticism applies at one level, the implications following from the criticism are mistaken. They are mistaken because the thesis does attempt to fairly assess the impact of the theory. That this is the case here is apparent in the care taken to specify and discuss assumptions throughout the thesis. Similarly, the tentative conclusions, outlines for empirical testing and attempts to place this work within contemporary Australian politics literature all make clear the seriousness of my attempts to assess, rather than vindicate, rational choice theory.

Chapter Outline

Chapter 1: What is Rational Choice Theory?

Chapter 1 provides an account of the major characteristics of rational choice theory. These include the use of deductive and formal models, methodological individualism and the rationality postulates, and rational choice theory's focus on the identification of equilibria. In spite of this list of characteristics, one of the main themes of this chapter relates to the diversity of work, in terms of assumptions, goals and characteristics, within the discipline. In this way, the characteristics listed here are in no way intended as a checklist for work that might be described as rational choice.

The theme of diversity is also apparent in the chapter's discussions of some of the main findings from the Virginia and Chicago Schools, social choice theory and spatial theories of voting. Each field examines different questions, makes use of distinctly different assumptions and, in the end, reaches different conclusions. My own judgement on each of these fields is as follows. I argue that social choice theory and spatial theories of voting are more likely than Chicago and Virginian approaches to prove useful to Australian political scientists. Part of the rationale for this judgement is my own belief that Chicago and Virginia School adherents place too much emphasis on the 'homo economicus' assumption, i.e. the assumption that individuals are guided by narrowly self-interested concerns in all areas of human endeavour.

Putting this judgement aside, my choice of case studies also reflects my interest in elections and party politics, topics studied by social choice theory and spatial theories of elections, rather than in regulation and constitutional engineering, topics traditionally studied by the Virginia and Chicago Schools. As such, apart from the explanatory account given in this chapter, the thesis spends little time on findings from the Chicago and Virginia Schools.

Chapter 2: Rational Choice Theory's Reception

Chapter 2 examines and assesses several of the major criticisms directed against rational choice theory. In fact, this chapter examines three different types of criticism. The most enduring of these criticisms focus on rational choice theory's use of rationality postulates and the self-interest assumption. More specifically, critics charge rational choice theory with having an overly heavily reliance on the self-interest assumption (e.g. Lewin 1991, 3-4; Stretton and Orchard 1991, 20; Zey 1992, 14). Chapter 2 responds to this criticism by examining in some detail whether particular rational choice models rely on wealth or power maximisation assumptions. The chapter concludes that use of the self-interest assumption is varied. Some rational choice theorems rely on both power and wealth maximising assumptions, some rely on one of these assumptions and some, like the models developed in this thesis, do not make use of the self-interest assumption at all. In this way, the criticism that rational choice theory adopts a mistakenly selfish model of human motivation is misplaced.

Criticisms relating to the role of rationality assumptions in rational choice theory are a different matter. Any honest appraisal of these criticisms must involve the recognition that human decision making is often in conflict with rational choice theory's rationality postulates. At the same time, however, the chapter makes the argument that this criticism is not as devastating to rational choice theory as critics claim. This is partly because, as mentioned previously, rational choice models explicitly attempt to abstract from political and social reality. As such, to hear that rational choice models do not fit with observed behaviour is not, by itself, a reason to alter these models. In addition, it is clear that these limitations in human reasoning might be sensibly included within rational choice models. In fact, this is just what has happened in the discipline. In this way, the charge that rational choice theorists make use of unrealistic rationality assumptions often highlights ways in which rational choice models might be modified so as to increase their realism, rather than to the theory's inherent failure.

While these complaints are important, they have not had the same impact on rational choice theorists as more recent criticisms in Green and Shapiro's *Pathologies of Rational Choice Theory* (1994). As mentioned earlier, Green and Shapiro argue that the universalist ambitions of rational choice theorists prevent practitioners from accepting the theory's empirical failures. Moreover, as they see it, this ambition drives theorists to engage in 'pathological' behavior aimed at preserving the theory's status as a universal theory of politics. Chapter 2 both investigates Green and Shapiro's arguments in a detailed way and outlines the range of responses provided by rational choice theorists. Most importantly, the chapter argues that Green and Shapiro are wrong to attribute universalist ambitions to all rational choice theorists. Instead, many practitioners readily recognise the limitations of their work. Given this recognition, the charge that rational choice theorists are engaged in pathological activity so as to save their theory carries significantly less weight.

Chapter 3: Spatial Politics and the 1998 Queensland State Election

Chapter 3 develops the first of three case studies. As such, the thesis shifts from a discussion of general trends in rational choice theory toward a more focused examination of topics of interest in Australian politics. More specifically, this chapter responds to two different sorts of claims that have been made about One Nation's rapid rise at the 1998 Queensland state election. The first claim, from Pauline Hanson, is that One Nation's increase in support is explained by the entry of One Nation as a party representing the views of previously ignored voters. The second argument, from academics, contends that there is insufficient data to determine whether Hanson's statement is right or whether One Nation's rise in power actually represents a rapid increase in racism. The chapter responds to these claims by modeling the change in seats that occurred at the election over, first, a single-issue dimension and, later, over two issue dimensions.

In the end, the chapter shows that spatial models of the election do enable us to gain further insight into One Nation's rise. Specifically, the model shows that the

change in seats that occurred at the election is consistent with Hanson's claim that the party gained support from alienated voters. As such, One Nation's increase in seats does not necessarily imply an increase in racial intolerance or any other preference change in the electorate. The model does imply, however, that the electoral contest occurred over at least two issues. In other words, it is not plausible to represent the change in seats that occurred at the election over a single-issue dimension. In addition, the model implies that the Liberals and One Nation occupied antithetical policy positions at the election and that the Labor party shared similar policy goals to One Nation on one issue dimension.

Chapter 4: The Australian Parliament and Policies of Optimal Compromise

In contrast to chapter 3, chapter 4 develops a model of policy interaction between parties in the Australian Parliament that is independent of the party make-up of particular parliaments. The chapter also establishes a measure by which policy outcomes should be assessed. That is, the analysis asks whether there are policy outcomes that serve as the best compromise between the often competing interests of citizens and argues that there are policies that fulfill these criteria. These policies, described as 'optimal compromises', are centrist, as opposed to extremist, policy outcomes.

With a normative argument in favour of centrist policy results established, the chapter asks whether Australian bicameralism is likely to deliver policies that approximate the optimal compromise. The analysis uses Downs' median voter theorem to answer this question. The chapter concludes that if the median voter theorem approximates the situation in the House of Representatives, and the major parties tend to co-locate at centrist policies, then the process of policy negotiation that is often necessary in Australian bicameralism will tend to draw policies away from the optimal compromise. If, however, the major parties do not co-locate at centrist policies, as is the case when the majors face the threat of entry by a third party, pre-selection contests or voter alienation, then bicameral bargaining is more likely to produce policy outcomes that qualify as optimal compromises.

Chapter 5: The 1999 Republic Referendum: Is There a Cycle?

Chapter 5 examines the third topic of contemporary interest in Australian politics - the 1999 referendum on whether the constitution should be altered 'to establish... Australia as a republic with ... a president appointed by a two-thirds majority of the members of the Commonwealth Parliament'. While there is much academic discussion on this topic, the chapter suggests an interpretation of the results that has not been investigated so far in the literature.

Chapter 5 examines the possibility, suggested by social choice theory, that the referendum result reflects the fact that there was a preference cycle over the three constitutional models that dominated the debate preceding the referendum - status quo (S), president appointed by two-thirds of parliament model (P) and direct election (D). That is, the analysis investigates the possibility that pairwise votes between the options on offer might show that group preferences are something like the following: S>D>P>S. This question merits consideration in its own right. If there is a cycle over the republic issue, then the referendum result reflects the structure of the vote, rather than underlying majority support for the status quo. In other words, if there is a cycle then we might just have easily seen the success of the president appointed by two-thirds of parliament or the direct election model.

Using survey data from the 1999 Australian Constitutional Referendum Study, the chapter shows that, in fact, there appears to be no preference cycle over the republic issue. Instead, the direct election model is clearly majority-preferred to the other alternatives.

More important than this conclusion is the point that, in asking whether there is a preference cycle, the chapter reaches some interesting conclusions on the structure of preferences over the referendum issue. Specifically, the chapter suggests that preferences over the issue are mostly single-peaked, where this means that voters prefer options that are closer to their ideal over options that are further away. From this observation, we can infer that most voters shared a common view of the

choice they faced on the republic issue. More specifically, we can infer that voters viewed the direct election model as being 'moderate' and the status quo and president elected by two-thirds of parliament model as being 'extreme' alternatives. This view is both contrary to the line advanced by 'yes' campaigners and to the intuitions of many commentators. Chapter 5 explores the implications of this finding and suggests that this observation actually underpins existing, apparently unrelated, explanations of the result.

Conclusion

The conclusion pulls together the findings from each of the case studies in this thesis. It highlights the benefits, limitations and lessons associated with the increased use of rational choice theory in the study of Australian politics and argues that the benefits - novel questions, emphases and explanations - associated with the approach are significant.

The conclusion also points to two broader lessons apparent in the thesis. First, the thesis shows that political scientists with an interest in rational choice theory must do more than simply import American and British conclusions into the study of Australian politics. Instead, there is a need to apply the logic and methods of rational choice theory to Australian circumstances. If we do so, the thesis shows, we will see benefits to both disciplines.

The second lesson from the thesis is that rational choice theory is compatible with a pluralistic approach to the social sciences. That is, there is no need to see rational choice theory as a replacement for existing explanations of political phenomena. Instead, this thesis contends that the conclusions advanced here complement existing accounts. In adopting a pluralist strategy, I have also shown a willingness to recognise the limitations of the approach. At the same time, however, this thesis argues that these limitations are not sufficient to outweigh the benefits to Australian political scientists associated with the extensive, largely untapped literature from social choice theory and spatial theories of elections. It is for this reason that this thesis ends with a call for the increased use of rational choice theory in the study of Australian politics.

1 WHAT IS RATIONAL CHOICE THEORY?

1.1 Introduction

Rational choice theory uses methods and concepts from modern economics to study political phenomena. In doing so, it explains how the pursuit of goals by individuals leads to systematic tendencies in social behaviour (Cox 1999 151; Dowding 1994, 106-107; Morton and Martin 1999, 75). There are four points to make about this definition. First, the theory's economic roots are important because this intellectual history informs the way that rational choice theorists set up and answer problems. Second, because the definition makes no mention of specific areas of study, it is clear that the approach, not the area of study, is important in rational choice theory. In this way, the breadth of the field is limited by the utility of the approach, rather than by disciplinary or sub-disciplinary boundaries. It is for this reason that this thesis uses the term 'rational choice theory' expansively to cover work with distinctive concerns, but common techniques.[1] Third, the definition hints at rational choice theory's commitment to methodological individualism, discussed in more detail in the next section. Fourth, it is clear from the definition that while behavioural assumptions and the structure of choices facing individuals are important as factors that drive rational choice explanations, the tastes and concerns of particular individuals are typically not the focus of explanation.

The definition given above captures something of the form, development and breadth of rational choice accounts of politics. Because of its brevity, however, it lacks an account of the content and diversity of work within rational choice

[1] This usage is not universal. Instead, one basic difficulty associated with study in this area is the large number of names used to characterise the discipline. The terms rational actor political theory, public choice theory, positive political theory and social choice theory are all in common usage. This thesis follows Cox (1999), Green and Shapiro (1996), Laver (1999) and Shepsle (1996) in their usage of the term 'rational choice theory' to describe the field at large and other terms, e.g. public choice theory, to describe sub-fields within rational choice theory.

theory. This chapter attempts to gain greater insight into the approach by examining a range of rational choice results. First, however, the chapter elaborates further on the common elements within rational choice theory. These include shared commitments to equilibrium analysis, model building, deductive reasoning, methodological individualism and rationality assumptions. With these common elements outlined, the remainder of the chapter sets about highlighting the diversity within the approach. Subsequent sections focus on key findings from the Chicago and Virginia Schools, social choice theory and spatial theories of voting. The conclusion provides an assessment of these different fields and makes an argument in favour of the use of social choice theory and spatial theories of voting.

1.2 General Characteristics

From the viewpoint of mainstream political science, much of what is distinctive about rational choice theory comes from the fact that the theory explicitly imports the methods and techniques of economics into the study of politics. Its preoccupation with models, equilibrium analysis and rationality, discussed in this section, come from modern economics. One of the most basic commitments held by rational choice theorists, however, has a broader intellectual heritage. This is the commitment to methodological individualism. [2]

Methodological Individualism

Before considering rational choice theory's employment of methodological individualism, note two cautionary points. First, there is an extensive literature on this topic that this section cannot deal with in any detail. Instead, the most that this section can hope to achieve is to highlight a few interesting points about these debates, starting with the observation that methodological individualism takes a number of different forms. Second, note that rational choice theorists often describe their work as abiding by methodological individualism, without

[2] Lukes (1968, 119) attributes the "...first clear articulat[ion]" of methodological individualism to Hobbes.

investigating in any detail the debates referred to above. In fact, there are both many good philosophical criticisms of methodological individualism and some suggestions, outlined below, that rational choice theorists do not need to endorse methodological individualism to carry out their work.[3]

With these cautionary notes established, the remainder of this section reports on different versions of methodological individualism that have been endorsed by rational choice practitioners. The section also briefly outlines a more inclusive methodological stance advanced by Pettit (1993) that is compatible with rational choice theory.

At its most extreme, methodological individualism involves a commitment to the idea that it is both possible and preferable to explain social phenomena in terms of individual human actions and intentions, rather than in terms of larger social units (Arrow 1994, 1; Lukes 1973, 110; Satz and Ferejohn 1994, 82). There are at least two reasons for this methodological stance. First, there is, as Elster refers to it, an aesthetic preference for explanations that identify the most basic explanatory factors. In other words, there is a preference for understanding the inner workings of social phenomena (Elster 1990, 47). Underpinning this aesthetic preference is the argument that it can be misleading to speak of large social units as having common ideals, purposes or actions. In making the assumption that social entities are unified actors, proponents of this version argue, researchers miss the inner power struggles, disputes and disagreements that almost always occur within large groups. This last comment leads to the second rationale for support of methodological individualism - the belief that explanations in terms of the behaviour of individual, as opposed to social, actors give a more accurate picture of social and political phenomena (Nettle 1997, 283).

A more moderate version of methodological individualism rejects the reductionism outlined above. According to Hausman (1995, 97) and Hindess (1988, 36), reductionism – the belief that all social phenomena are reducible to the behaviour of individuals - is not logically tied to methodological individualism.

[3] For criticisms, see, for example, Nozick (1974, 18-22). See also Lukes (1973, 113) for references to significant debates on this topic.

Instead, methodological individualists might believe that it is best to try to explain social phenomena in terms of the actions and beliefs of individuals, but that there are also real non-reducible social entities that constrain the behaviour of individuals.

At the same time, however, adherents to both of these versions argue that, where possible, it is important to identify the inner logic within aggregate bodies. For example, while Downs (1957) assumes the existence of unified parties in his account of the median voter theorem, subsequent work, like that by Aranson and Ordeshook (1972) relaxes the unitary actor assumption. That is, Aranson and Ordeshook explicitly examine the impact of competition between candidates for pre-selection on Downs' theory of two party convergence. In addition, despite the fact that rational choice models often assume that social entities are unified actors, many rational choice theorists argue, as a matter of principle, that only the individuals within the group, rather than the group as a whole, can have goals and desires (Flanagan 1998, 5).[4]

Implicit in both of these versions of methodological individualism is the assumption that individual-level explanations are preferable over aggregate-level explanations. Again, it seems likely that rational choice theorists need not adopt such extreme methodological positions. Instead, practitioners might adopt a methodological stance described as explanatory ecumenism (Pettit 1993, 263). According to this methodological position, whether an individual-level or aggregate-level explanation is more valuable depends on the nature of the question and issue. Some questions are better answered with reference to aggregate entities and trends, others with individual-level explanations. Pettit's argument is that there is no need to determine, in the abstract, which of these explanations is more valuable. Instead, we can make use of both types of explanations in different scenarios.

[4] For a strong argument to this effect, see Shepsle (1992).

Explanatory ecumenism and weaker forms of methodological individualism help make sense of two different characteristics of rational choice theorising. First, they explain why so many rational choice accounts (e.g. Downs' median voter theorem) speak in terms of social entities like parties and firms, rather than in terms of individuals. Whereas the strict version of methodological individualism would disapprove of these explanations, the other methodological positions are more sanguine about such theorising.

Second, adherence to either of these more inclusive methodological positions also ensures that rational choice explanations are compatible with structural accounts that "...functionally define actors in terms of the roles they play. Thus actors are 'voters', 'capitalists', 'workers' and so on" (Dowding and Hindmoor 1997, 452). This is another way of stating a point made in the introduction, i.e. that while individual motives and behaviour are important as factors that drive rational choice explanations, rational choice explanations say very little about individual human psychology (Dowding 1994, 107;115).

There is one further point to make about methodological individualism. This relates to the distinction between methodological and moral individualism. Whereas the former provides an argument about how social phenomena should be explained, moral individualism makes an argument about how different ends should be assessed (Hamlin and Pettit 1989, 7-10). In short, moral individualism amounts to the belief that the effects on individual human beings are most important in ethical decision making. Attempts by social choice theorists to develop voting mechanisms that consistently and fairly reflect the preferences of citizens, for instance, are based on a form of moral individualism. Practitioners believe that consistent voting methods are valuable because they bring about outcomes that best reflect the desires of individuals. Importantly, while work within some fields of rational choice is characterised by moral individualism, it is not a necessary component of methodological individualism. As a result, there is much work in the field that takes the principle of methodological individualism as being significant, without adopting moral individualism.

The rational choice commitment to methodological individualism is closely tied to the idea that social outcomes result because individuals act in purposeful ways to achieve their goals (Aranson 1989, 98), or, in other words, individuals maximise their utility.[5] Again, there are two caveats that should be noted about this assumption. First, such purposiveness does not imply that individual action is calculating. Instead, because the costs associated with gathering information may be significant, rational choice theorists recognise that individuals will often act in purposeful ways by utilising habits, instincts and other cues to understand complexities in the social world (Ordeshook 1986, 1-2). Second, it is also clear that this assumption does not suggest that individuals undertake behaviour so as to bring about particular social outcomes. Following from economics, much work in rational choice highlights the unintended social consequences of individual behaviour. As such, rational choice commitments to methodological individualism and to the assumption that individuals behave purposefully cover a wide range of different behaviour.

Model Building

Rational choice theorists hold another general commitment to model building, where models are described as "...internally consistent bodies of theory that describe human behavior or physical phenomena" (Hinich and Munger 1997, 3). Most models in rational choice theory are formal and parsimonious. That is, they start with a small number of explicit behavioural assumptions and use deductive techniques to determine the conclusions that logically follow from these assumptions (Morton 1999, 37).

Because practitioners develop models of political phenomena, rational choice explanations and assumptions are inevitably unrealistic at times. While rational choice theorists often admit the lack of realism of their assumptions and explanations, these formal and parsimonious explanations and assumptions are

[5] When outcomes are uncertain, individuals maximise their expected utility.

maintained, for two reasons.[6] Firstly, the use of parsimonious assumptions and explanations enables practitioners to systematically track the logical implications of assumptions. In other words, there is a clear tradeoff in all models, rational choice or otherwise, between added realism and tractability. In all models, the addition of more realistic assumptions risks obscuring the link between assumption and conclusion (Morton 1999, 40). For this reason, a model with inaccurate assumptions and clear conclusions might be preferred over a model with realistic assumptions and ambiguous conclusions. Even if the conclusions of the first model do not receive empirical support, we will have learnt something about alternative states of the world. In contrast, the second model, with its realistic assumptions but ambiguous conclusions, teaches us very little. Second, modelers might prefer to retain unrealistic assumptions until it is shown that the adoption of more realistic assumptions impacts on the conclusions of the model. If, on the contrary, the introduction of increasingly realistic assumptions does not impact much on the conclusions of the model, then greater realism adds greater complexity without adding to the explanation (Morton 1999, 142).

Lastly, there is a strong argument associated with the model building process in favour of extensive re-adjustment and re-examination of assumptions and conclusions. It is clear why this happens when models prove unhelpful - different assumptions may yield different and more insightful conclusions. The examination of assumptions is equally important, however, when a particular model proves insightful. This is because modifications and extensions help to determine the robustness of particular results. That is, they show the conditions under which different results hold (Dowding 1997, 153). Work of this type pushes the boundaries of the result and, as such, often tells us much more about real-world politics than the original model.[7]

[6] Not all rational choice theorists hold this view. Some theorists in the Chicago and Virginia Schools argue that parsimonious assumptions do accurately reflect human behaviour. See later sections for more discussion.

[7] Critics who cite rational choice theory's adaptation of assumptions as a sign of disciplinary decay miss the point that these alterations are part of the model-building process.

Equilibrium Analysis

The adaptation and extension of basic assumptions is also important because rational choice theory is interested in identifying the conditions required to achieve equilibria. In fact, there are many different types of equilibrium (Gates and Humes 1997, 2). One form of equilibrium comes from game theory. Following Nash's game theoretic definition, equilibrium occurs when each actor's strategic choice is a best reply to the strategic choices of all other actors (Binmore 1992, 12). This means that, given the choices made by others, an individual can take no other action that will bring her closer to her goal. When an equilibrium of this sort exists, no individual has an incentive to adopt a divergent strategy. The flipside of this definition is that actors will be drawn toward equilibrium strategies simply because they can do no better than to adopt an equilibrium strategy. In this way, equilibria are stable as the long as the underlying conditions are unchanged. Another form of equilibrium describes the competitive market. In economic theory, competition drives producers and consumers to buy and sell at the price where the marginal cost of producing an extra unit of the good equals the marginal benefit of consuming an extra unit of that good. This equilibrium is not strategic because even if an individual consumer chooses to sell or buy at another price, this decision will not affect the equilibrium, but is nonetheless stable and the product of competitive forces (Morton 1999, 104).

Stability does not ensure, however, that equilibrium outcomes are normatively desirable. In fact, rational choice theory identifies a range of equilibria that are undesirable. The most famous of these is an equilibrium result that arises from the prisoners' dilemma. Briefly, the prisoners' dilemma specifies that two prisoners are separately interrogated in gaol. If both keep quiet, then both will be prosecuted, but will serve minimal sentence of 1 year each. If one informs on the other and one stays quiet, then the prisoner who stayed quiet is punished severely. He gets 10 years in gaol and the prisoner who informed is allowed to go free. Lastly, if both prisoners inform on each other, then both go to goal, but for only 5 years each. The payoffs of two strategies, in terms of years in gaol, which are valued negatively by players, are as described in table 1.1.

Table 1.1: Prisoners' Dilemma

Payoff to B/ Payoff to A	**Prisoner A stays quiet**	**Prisoner A informs**
Prisoner B stays quiet	1, 1	10, 0
Prisoner B informs	0, 10	5, 5

Given the payoff structure in table 1.1, it is clearly best for both prisoners if both remain quiet. The problem with this conclusion is that staying quiet is not a Nash equilibrium strategy.[8] To see this, note that if prisoner B thinks that prisoner A is going to stay quiet, then the best possible strategy for prisoner B is to inform on A. If B informs and A stays quiet, then B will get a payoff of 0 years in gaol, rather than 1 year in gaol. If, in contrast, B believes that A is going to inform, then B should also inform. That way, B will receive 5, rather than 10, years in gaol. According to this logic, B's best strategy in both scenarios is to inform. Because the payoffs to A are identical, informing is also the best option for A. If both inform, however, the outcome will be one that is bad for both prisoners – both will go to gaol for 5 years. In this case, informing is an equilibrium strategy for both prisoners even though it produces an outcome that neither wants. Other normatively unattractive equilibria include the tragedy of the commons and market failures in the provision of public goods (Hardin 1968).

Rationality Assumptions

The last feature discussed in this section relates to rational choice theory's use of the rationality assumption. Whereas other behavioural assumptions, e.g. those relating to self-interest or wealth maximisation are often modified, "[t]he rationality hypothesis serves as an internal principle guiding the evolution of the theory and is not itself seen as an object of direct empirical investigation, remaining instead largely in the background" (Ferejohn 1995, 255). The most basic elements of the rationality assumption are twofold. Preferences are

[8] Again, a Nash equilibrium strategy occurs when each actor follows the best strategy that s/he can take in response to the actions of the other players.

transitive and complete. Completeness requires that individuals can express a preference (better than, worse than or indifference) between all alternatives on offer. Transitivity, on the other hand, is something akin to consistency. It means that if an individual prefers option 'a' to option 'b' and option 'b' to option 'c', then she also prefers option 'a' to option 'c'. Both of these assumptions are subject to criticisms that are examined in chapter 2. They are nonetheless crucial to most rational choice theory. Some of the rationality assumptions mentioned earlier, especially wealth maximisation, are also common in rational choice theory. The content of these assumptions differs, however, from model to model and for this reason, the content of rationality assumptions is discussed separately in the following sections.

1.3 The Chicago School

The explicit justification for much of the work from the Virginia and Chicago Schools is captured in Buchanan's (1984) plea for "politics without romance". In a large part, this stance is taken in opposition to earlier economic theory on the prevalence of market failure and the conjecture that government intervention will redress such failure. Writers in both the Chicago and Virginia School traditions argue that welfare economics makes the misleading assumption that individuals are motivated by self-interest in their economic pursuits and by public-interest in social and political matters (Peltzman 1989, 4). In contrast, Virginia and Chicago theorists argue that consistency and positive analysis demand that models of human behaviour in political science and economics adopt identical assumptions about human motivation (Schwartz 1999, 138). What is more, since the homo-economicus assumption (i.e. the assumption that behaviour is guided by self-interest) has proved useful in the study of economics, these theorists argue, there is an a priori argument for its extension to other areas of human activity (Tullock [1986] 1994, 87-88).

Research from the Chicago and Virginia Schools provides this extension. In more specific terms, Chicago and Virginia School writers highlight the existence and scope of political/government failure, alongside the already burgeoning literature

on market failure. While the motivations of Chicago and Virginia School writers are similar, their work is different in significant ways. For this reason, the remainder of this section focuses solely on work from the Chicago School. Section 1.4 examines Virginia School approaches to the study of politics.

Much of the most famous work by the Chicago School focuses on the economics of regulation. In keeping with the injunction to adopt identical motivational assumptions in market and political behaviour, Peltzman argues that the theory of regulation is underpinned by the assumption that:

> [p]oliticians, like the rest of us, are presumed to be self-interested maximisers. This means that interest groups can influence the outcome of the regulatory process by providing financial or other support to politicians or regulators. (Peltzman 1989, 1)

This quotation nicely captures three important characteristics of the Chicago School approach. First, it highlights the Chicago School assumption that politicians are utility maximisers and, more specifically, that politicians (and bureaucrats) maximise votes and income. Second, and in spite of the first sentence in this quotation, the real concern for Chicago School scholars is the behaviour of interest groups, rather than politicians. Third, the quotation makes clear that Chicago School adherents view regulation in a starkly different light to earlier welfare economists. In fact, Stigler (1971) and Peltzman (1976, 1989) challenge the welfare economics view that regulation is introduced in industries characterised by market failure. They argue, in contrast, that regulation often meets the demands of interest groups, rather than the community, and that the regulatory process is best characterised in terms of bargains between regulator and regulated (Peltzman 1976, 211-212).

Stigler (1971) states the most extreme version of this argument. He argues that producers typically have more incentives to lobby regulatory agencies than do consumers. This is because, first, with generally small numbers of producers, the payoffs to individual producers from lobbying to secure beneficial regulatory changes will be larger than the payoffs that individual consumers might secure

from such lobbying. Second, with fewer producers than consumers, the costs of organisation (e.g. communication and decision-making) will be smaller for producer groups than for consumer groups. Together, these facts imply that producer groups will be more intent, and typically more successful, than consumer groups at securing monetary benefits from the government (Mueller [1989] 1993, 239). In the extreme, Stigler suggests that government regulators, established ostensibly to prevent monopoly suppliers from extracting maximum profit, may be 'captured' by regulated firms. The means of capture are varied, but include the possibility that individuals within the regulatory agency might seek future employment in the regulated industry. When incentives of this form exist, regulated firms can exert enormous influence over regulators and, as a consequence, ensure greater profits for themselves (Mueller [1989] 1993, 235-237).

A later version of this argument backs away from Stigler's assertion that producer groups will always benefit at the expense of consumer groups. While Peltzman maintains the argument that interest groups will compete against each other so as to achieve a more favourable distribution of wealth, he argues that politicians will maximise votes by spreading votes across consumer and producer groups (Peltzman 1989, 9). As such, diffuse groups of consumers will gain some benefits through regulation.

Interestingly, Peltzman's own assessment of the success of Chicago School accounts of regulation is far from triumphant. He says "[m]y overall answer is that it does [outperform earlier competitors], though the economic theory of regulation has its share of failures and unanswered questions" (1989, 19). As Peltzman admits, one of the problems associated with the Chicago School account is that whereas the welfare economics account of regulation under-predicts the incidence of regulation, the Chicago School account over-predicts its incidence. Most seriously, the approach has trouble accounting for worldwide trends toward deregulation.

The Chicago School account of interest group activity shares common elements with work by Olson ([1965] 1998) and Tullock (1965).

In fact, Olson's *The Logic of Collective Action* (1965) encapsulates a more detailed and famous form of Chicago School reasoning on the topic. Olson's work is best known for his specification of the free rider problem. Briefly, the free rider problem occurs when individuals who would benefit from the provision of some collective good fail to take action to bring about its provision. Olson argues that it is rational for individuals to free ride when the following conditions hold:

1. The marginal benefit to an individual of action is smaller than the marginal cost to that individual of action.
2. The contribution of an individual actor makes an imperceptible difference to the outcome. This is most likely when collective action requires the involvement of large numbers of people.
3. The likelihood that a particular individual's contribution will be decisive is small. Again, the chances of being decisive decreases as the number of actors increases (Dowding 1997, 271; McLean 2000, 655).

Two interesting implications result from the presence of the free rider problem in collective action. First, the existence of the problem typically ensures that collective goods are under-provided. If the free rider problem is present in its most extreme form then some interest groups may not form at all, even though some people would benefit from collective action. This occurs when the cost associated with gaining information is substantial and the benefits are spread across a large number of individuals (Olson [1965] 1998, 165-167). Second, according to Olson, any large interest group that forms must have previously overcome the free-rider problem.[9]

[9] Some small groups will be less affected by the free rider problem because they might be able to both detect free riders and exclude non-contributors. In small groups it is also possible that a single individual will be willing to bear the costs of provision themselves because they value provision more highly than it costs to provide the good. This tends to result in under provision of the good and a bias in favour of members who value the good less highly. (see Olson [1965] 1998, 33-36)

Olson suggests that large groups may overcome the problem in one of two ways:

1. by developing 'separate and selective incentives', both social and economic, that are associated with membership. These include positive incentives like cheap meals and negative incentives like intimidation.

2. by possessing the authority to coerce citizens to join the interest group. (Olson [1965] 1998, 132-135). Here, Olson refers to something like compulsory union membership.

Work influenced by the Chicago School has taken two contrasting directions. On the one hand, much theory influenced by the Chicago School draws a dark picture of politics. For instance, Niskanen (1971) argues that the public sector is characterised by the principal-agent problem. This problem occurs when the principal (here, politicians and, ultimately, the voters) cannot accurately monitor the actions of their agents (in this case the bureaucrats).[10] The result of these informational asymmetries is that bureaucrats possess tremendous advantages over legislators. In reaching his conclusion, Niskanen makes two assumptions about bureaucrats. First, Niskanen assumes that bureaucrats aim to maximise their material gains (e.g. income, travel, office size). Second, Niskanen assumes that whereas legislators are honest about their demand for the services that bureaucracies supply, bureaucrats are able to hide the costs of such services. When these assumptions are combined, i.e. when we have self-interested bureaucrats who also have more knowledge than legislators, Niskanen reasons that bureaucrats will manipulate the information they provide to politicians so as to enhance their career prospects and material rewards. If, for instance, control over large departments is valued, then bureaucrats will provide selective information that maximises the chance of departmental expansion. If all bureaucrats behave in this way, then the bureaucracy, and the goods and services provided by it, will be much larger than is demanded by the community (1971, 38-41).

When combined with the concerns mentioned earlier, i.e. that legislators will trade campaign promises for votes, the picture of modern democracy becomes very

[10] See Barro (1973) and Weingast (1984) for more on the principal-agent problem.

dark. As Aranson argues "...the stuff of legislative action concerns the exchange of private benefits, collectively supplied, for votes, endorsements, and campaign contributions, rather than the principled creation or pursuit of the public interest" (1983, 169). This phenomena is worsened if, as Stigler and Peltzman point out, bureaucrats compete for the spoils or interest groups change their behaviour so as to access some of these benefits. In the end, as Muller states "[t]he entire federal budget can be viewed as a gigantic rent up for grabs for those who can exert the most political muscle." ([1989] 1993, 243)

In contrast, more recent work associated with the Chicago School has argued that democratic politics might deliver positive economic benefits. As Wittman says, "I show that democratic political markets are organized to promote wealth-maximising outcomes, that these markets are highly competitive, and that political entrepreneurs are rewarded for efficient behavior"(1989, 1395-1396).

Wittman starts his argument with the claim that efficient markets (democratic and economic) tend to arise only when participants are reasonably well informed, competition exists and there are well-defined property rights (1989, 1396). Wittman then sets about showing how each of these three conditions is fulfilled in modern democracies. He argues first that voters are both significantly better informed and better able to make correct judgements when voting than has typically been recognised by rational choice theorists. That is, he reasons that voters receive sufficient information from candidates and interest groups during political campaigns to correctly choose the candidate who will best represent their interests. Second, Wittman reasons that competition between parties for votes provides candidates with strong incentives to serve the interests of constituents. In other words, "...political entrepreneurs are rewarded for efficient behavior." (1989, 1396) Third, Wittman makes the argument that democratic markets are structured in ways that minimise transactions costs. The small number of members in a legislature, for instance, reduces the costs of negotiation between parties with conflicting interests and creates room for, as Wittman refers to it, 'efficient logrolling' (1989, 1403). Putting all this together, Wittman's argument is that the inefficiencies often ascribed to democracies by rational choice theorists

are overblown. Instead, 'democratic markets' suffer no more from rent seeking behaviour, monopoly and insufficient information than do economic markets.

Wittman's work has received much criticism from other rational choice theorists (e.g. Lott 1997; Rowley 1997). In general, respondents argue that Wittman overcompensates in his attempt to redress the unbalanced treatment of democratic versus economic markets by rational choice. That is, while Wittman is right to point to factors, like competition between parties, that will tend to ensure greater efficiency in democracy, the Wittman picture of democracy is altogether too sanguine.

1.4 The Virginia School

Section 1.3 began by arguing that the Virginia and Chicago Schools share the assumption that individuals acting in personal, economic and political roles are primarily motivated by self-interest. The similarities between practitioners extend past this shared motivational assumption to complementary work on topics such as rent seeking, interest group activity, regulation and the bureaucracy (Congleton 1999). The major difference between the schools is, as Rowley (1992) sees it, their willingness to make use of the assumption that human behaviour is motivated by utility maximisation. Rowley argues that members of the Virginia School use the assumption, but also admit room for mistake, change and improvement. This contrasts with members of the Chicago School who, he argues, do not see a role for behavioural change at all. In the end, Rowley asserts, Chicago commitments to the use of the utility maximisation assumption amount to determinism (Rowley 1992, 38).

Whether this distinction is fully convincing or not, it is clear that the adherents of the Virginia School put more emphasis than members of the Chicago School on constitutional design. This emphasis was first evident in Buchanan and Tullock's *Calculus of Consent* (1962). Buchanan and Tullock examine the institution of majority rule voting and argue that because decisions under this voting rule require no more than fifty-one per cent support, coalitions with bare majorities can impose significant costs on other members of the community. In addition,

Buchanan and Tullock argue that we should expect to see vote trading between members of Congress. This is because the welfare of constituents "...can be improved if ...[a legislator] accepts a decision contrary to his desire in an area where his preferences are weak in exchange for a decision in his favour in an area where his feelings are stronger" (Buchanan and Tullock [1962] 1974, 145). Vote trading is distinguished from vote buying by its rationale. Whereas vote buying is motivated entirely by personal gain, vote trading might be driven by the sole purpose of increasing the welfare of constituents. In either case, however, we can expect that vote trading will lead to the over-provision of public goods under majority rule ([1962] 1974, 131-145).

One way to overcome the problems of majority rule, Buchanan and Tullock argue, is to adopt unanimous voting rules. There are twin arguments in favour of unanimity. First, lacking knowledge of whether one is likely to benefit from majority rule, Buchanan and Tullock argue that the only decision rule that overcomes the problems of exploitation and over-provision is unanimity rule. The reason for this is simple. With unanimity, individuals have a veto over disadvantageous policies (Buchanan and Tullock [1962] 1974, 81). Because of this veto, unanimity guarantees that majorities will not exploit minorities.

Second, Buchanan and Tullock argue that when combined with the rule that decisions must be determined by unanimity, logrolling (or legislative vote trading) takes on a more positive gloss. A simple example illustrates their point. Consider two legislators, A and B, both of whom want to serve the interests of their constituents. Suppose that legislator A believes that the best thing for his electorate is more spending on education and B favours more spending on roads. Imagine, also, that A has greater support for his proposition among other legislators than B. With a fixed budget and majority rule, A might garner enough support from a coalition with other legislators to push through his proposal for education spending. Legislator B will vote against increased spending on education, but because she is in the minority, will lose and will be forced to pay for the education that A favours. In contrast, under vote trading and unanimity rule, A will be impelled to gain the support of all legislators, not just a majority. In order to do so, A might offer to support a program promising less spending on

education and endorse, in addition, some provision for road spending if B supports A's proposed legislation. Buchanan and Tullock's main point in this is that the wishes of all citizens may be better served if vote-trading is permitted, as long as individuals have the veto explicit in unanimity rule ([1962] 1974, 132).

The problem with unanimity rule, Buchanan and Tullock argue, is that the costs associated with securing unanimous agreement might be significant. It is for this reason only that Buchanan and Tullock argue that less-than-unanimous decision-making rules may be appropriate in real world legislatures ([1962] 1974, 111).

1.5 Social Choice Theory

While there are common elements, work within social choice theory is very different from that highlighted so far[11]. For one thing, social choice theorists are primarily concerned to design voting mechanisms that aggregate individual preferences into a single preference relation. This intellectual concern is sometimes traced to ancient times (e.g. McLean and Urken 1995, 60), but it is more standard to start with the work of the two eighteenth century mathematicians, Borda and Condorcet. While the former anticipated some of Condorcet's work, Borda is best known for his argument in favour of the full revelation and use of voter preferences (Black 1958, 156-159). In contrast, Condorcet is recognised for his finding that majority rule might produce non-transitive social preferences and preference cycles even if all individuals in the group have transitive preferences.[12] This problem is apparent when pairwise elections between candidates deliver results like the following: candidate 'a' secures a majority of votes against candidate 'b', candidate 'b' secures a majority of votes against candidate 'c' and candidate 'c' secures a majority of votes against candidate 'a'. (Ordeshook 1986, 56-9; Mueller [1989] 1993, 63-64) Clearly, none of the three candidates is a stable winner.

[11] Common elements include shared rationality assumptions and predilections toward parsimony and deductive reasoning.

[12] Borda also recognised this problem, but did not state the normative value of a 'Condorcet winner', where a Condorcet winner is defined as an option that beats all candidates in head-to-head elections.

One of the most important developments in the social choice literature on cycling after Condorcet came from Arrow (1951). Arrow proved that there is no way to map the rankings of individuals into a common ranking that satisfies five seemingly minimal conditions, without resorting to dictatorship or incoherent social preferences. Arrow's conditions are:

1. Social Ordering: Group and individual preferences are complete and consistent (transitive) over all alternatives.

2. Unrestricted Domain: As long as preference orderings are complete and transitive, no logically possible preference ordering is excluded from the domain of social choice.

3. Unanimity (Pareto optimality): If every individual in the group prefers policy L to policy M, then the group preference must also show a preference for L over M.

4. Independence of Irrelevant Alternatives: A change in preferences by individuals over a policy that is unrelated to the policy comparison at hand will have no impact on the social choice, e.g. if all individuals prefer policy C to policy D, the fact that some individuals change their minds over whether they like policy J or K will have no effect on the social choice between C and D.

5. Non-dictatorship: No individual has a position in the group such that if s/he favours one alternative (A) and the rest of the group favours a second alternative (B), the group decision will be in favour of A. [13]

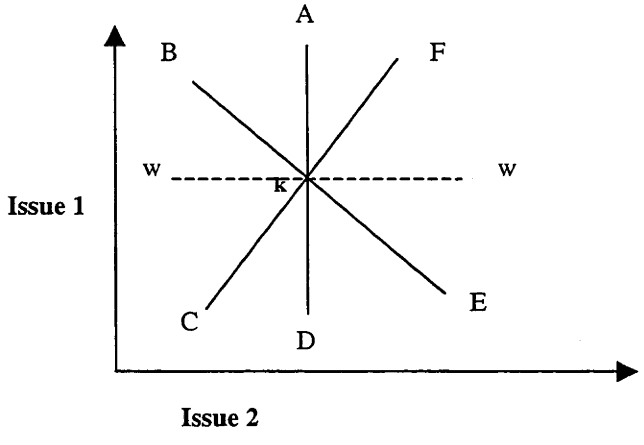
It is not an overstatement to say that social choice theory has developed as a field in response to this single theorem (Milne 1997, 19). Subsequent work has sought both to test the robustness of Arrow's assumptions and to investigate the implications of the theorem. Two key implications deserve some discussion here. First, Gibbard (1973) and Satterthwaite (1975) show that no minimally democratic voting rule is immune from the incentive to vote strategically. This does not

[13] There are many different ways to present this result. This presentation follows Ordeshook (1982, 60-62) and Mueller ([1989] 1993, 384-387). For an alternative presentation, see Riker ([1982b] 1988, 115-119).

mean that strategic manipulation occurs in all elections, just that for every voting system there is some preference structure that provides incentives for at least one voter to act strategically (Ordeshook 1986, 82-89). A second key implication is that all preference aggregation methods are potentially vulnerable to a trade-off between dictatorship and stability. As with strategic voting, the theorem says nothing about the frequency or severity of cycles, but does show that Condorcet's paradox is not a product of any particular voting method, short of unanimity. Instead, cycles eventuate because of the make-up of preferences and, as a result, are possible in all preference aggregation procedures (Riker 1982a, 9; Riker 1996, 130).

Other theoretical work since Arrow does show, moreover, that the conditions required to achieve stable policy outcomes over multiple issues are highly restrictive (N. Miller 1995, 62; Plott 1967; Schofield 1983). Foremost among a series of results in the field is one by Plott that is, roughly, as follows: if there are an odd number of voters and all voters, bar one (called 'k'), can be matched into pairs so that the line connecting each pair passes through the ideal point of voter 'k', then the policy preferred by 'k' will be the equilibrium (1967, 790). The logic of this result is best seen with the aid of figure 1.1, a diagram that graphs the ideal policy combinations of seven voters ('A' through 'F' and 'k') over two issues.

Figure 1.1: Plott's conditions for stability over two issue dimensions



Each of the letters in figure 1.1 represents the ideal policy combination of an individual voter. For instance, voter A prefers high provision of issue 1 and middling provision of issue 2.

The lines connecting each pair of voters in figure 1.1 are called contract curves.[14] The idea behind the contract curve is that for any point not on the line, there are some points along the contract curve that are preferred by both voters. In other words, both voters can be made better off by adopting a policy on, rather than off, the contract curve. Once the pair agrees on a policy that falls on the contract curve, however, they will be unable to agree to move to any other policy on the contract curve. This is because, once on the contract curve, any gain to one voter is necessarily at the expense of the other.

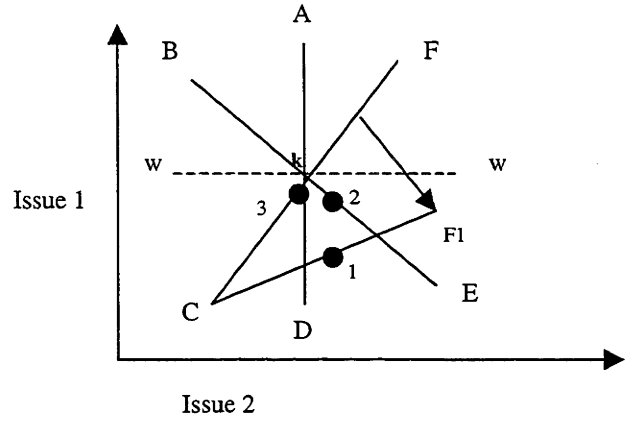
When contract curves cross, as in figure 1.1, the point at which they cross (k) is a stable equilibrium. This means that 'k' will beat all other alternatives in majority rule contests. To see that this is the case, note that the line 'ww' through 'k' cuts the group of voters in half, i.e. equal numbers of voters fall on opposite sides of 'ww'. This means that in a competition between policy 'k' and any policy combination below 'ww', the new policy would gain support from voters C, D and E. Voters A, B, F and k, however, will favour policy 'k' because 'k' is closer to their favourite levels of provision than any policy below 'ww'. With four votes to 'k' and three votes to any policy under 'ww', policy 'k' will win the contest. Any policy above the line 'ww' will similarly be beaten by policy 'k'. Moreover, because of the conditions set out in Plott's theorem, this result holds for all possible lines that might be drawn through policy 'k'.

Policy 'k' is stable as long as the contract curves of voters with opposing preferences cut each other at the same point. If this scenario changes, though, then 'k' will no longer be the equilibrium. Consider for instance, what happens when, as in figure 1.2, one voter changes her mind about her most preferred

[14] The contract curves in these figures are straight lines because it is assumed that voter preferences are determined by euclidean distances (Ordeshook 1982, 23-26). See the discussion of spatial theories of elections in section 1.6 for more discussion of euclidean preferences.

option. Figure 1.2 describes the same situation as figure 1.1 in all ways, except that voter F prefers more of issue 2 and less of issue 1 than she did in the first example.

Figure 1.2: Cycling



This small change in F's preferences is enough to upset the equilibrium that previously existed. Now, there is a cycle. To see that this is the case, consider the outcome of a vote between policy 1 and policy 'k'. As in figure 1.1, policy k will gain the support of the voters above the line 'ww' (voters k, B and A). In contrast to the previous example, however, policy 1 will gain the support of the other four voters (C, D, E and F1). Policy 1 is thus majority preferred to policy k. At the same time, it is clear that policy 1 is not the equilibrium either. So, for instance, in a competition between policy 1 and 2, policy 2 will win majority support from F1, A, K and B. Policy 2, however, can be beaten by policy 3 (with support from B, C, K and A). To complete the cycle, policy 3 is beaten by policy k (with support from A, B, K and F1). In short, policy 1 beats policy 'k', policy 2 beats policy 1, policy 3 beats policy 2 and policy k beats policy 3.

Figure 1.2 helps emphasise two social choice theoretic conclusions that have already been mentioned. First, when Plott's conditions for stability do not exist, majority rule decisions can cycle over different alternatives. Second, the example shows that the conditions required for stability are stringent. A direct

consequence of this stringency is the conclusion that the likelihood that these conditions will arise is very small. The conditions required for stability become even more onerous when decisions take place over more than two issues and involve larger numbers of participants. In fact, computational estimates by Riker ([1982b] 1988, 122) and Jones et. al. (1995, 139) show that as the number of alternatives and/or voters increases, the likelihood of stable decisions achieved through majority rule falls dramatically.

On a related point, McKelvey (1976) shows that when a cycle exists, an actor with knowledge of the preferences of other members of the committee or legislature and control over the order in which alternatives are voted on, can ensure that the group adopts his own preferred policy. McKelvey's basic argument is that no matter where the status quo is in the policy space, an agenda setter can use a series of votes decided by majority rule to engineer the adoption of any policy position in the policy space (McKelvey 1976, 472). In Arrow's terms, McKelvey's result emphasises a trade-off under majority rule between instability due to cycling and agenda manipulation. That is, we might see policy stability only because an agenda setter engineers this outcome (Shepsle and Bonchek 1997, 101-103).

Rational choice theory has responded to these instability findings in at least five different ways. First, Riker ([1982b] 1988) uses these findings to mount an attack on what he describes as populist accounts of democracy. Populists, he argues, believe that 'the people's' desires should be policy. Riker contends that this goal is not viable because it is impossible to gain an accurate picture of voter wishes. Instead, the results of elections will "[s]ometimes ...be accurate, sometimes not"([1982b] 1988, 236). The situation is even worse than this for populists, however, because it is impossible to tell the difference between elections that give an accurate picture of the majority preferences of voters and elections that are influenced by agenda setting, strategic voting and cycling.

In the face of this unavoidable problem, Riker argues that we should simply accept that the only plausible picture of modern democracy is a liberal conception, in which "[t]he kind of democracy that ...survives is not, however, popular rule, but rather intermittent, sometimes random, even perverse, popular veto"([1982b] 1988, 244).[15]

A second type of response comes from Tullock (1981). Tullock observes that despite extensive theoretical findings, there are few empirical examples of cycles. Noting this discrepancy, he asks the question 'why so much stability?' and answers by emphasising the role of logrolling (or vote trading) in legislatures. He conjectures that logrolling provides stability whether vote trading takes place between individual legislators or between coalitions in the legislature. If coalitions between individuals are viable, vote trading between all legislators is stable because no individual legislator can be made better off by abstaining. Individual legislators who refuse to participate in logrolling will gain none of the its benefits (i.e. the passage of favourable legislation) and will bear the costs of logrolling by other legislators (i.e. the costs associated with the passage of everyone else's bills). In these circumstances, the Nash equilibrium involves logrolling by all legislators (Tullock 1981, 193).

Tullock argues that vote trading within legislatures composed of coalitions will also be stable. This situation is different because, unlike the previous scenario, members within a majority coalition will always be tempted to defect from the majority coalition to take up offers from members of minority coalitions to form a new coalition with higher individual payoffs. Tullock argues that members of majority coalitions will not give in to this temptation because while defection may result in some gains, these gains are likely to be short-term (Tullock 1981, 193-194). That is, because the defector can be reasonably sure that members of the new minority will attempt to form a third majority coalition that excludes the defector (whose position is shaky because she is receiving greater returns in the current coalition), she will choose not to defect at all. The stable equilibrium thus involves bargains between members of the initial majority coalition.

[15] Riker also speculates that cycles are not more common because agenda setters end cycles at points that suit their own political ambitions (Riker [1982b] 1988, 237)

The last three responses to social choice findings on majority rule fall jointly within social choice and spatial theories of voting. These responses involve the development of weaker equilibrium concepts, structure-induced equilibria and probabilistic voting.

Of these developments, the theory of weak equilibrium concepts is the most abstract and removed from practical politics. This work is formal and mathematically complex. In short, however, writers like Cox (1987) and Miller (1980) argue that while the conditions for strong equilibria over multiple issues are stringent, other weaker equilibria are still likely to exist. For instance, there is theoretical and empirical support for the predictive qualities of policies that fall within the 'uncovered set', described briefly below.

The uncovered set is composed of the set of policies that either (1) cannot be directly beaten by any other alternative or (2) cannot be indirectly beaten by any other alternative (Mueller [1989] 1993, 187). The first part of this definition is straightforward. Any policy that cannot be directly beaten by any other policy clearly forms part of the equilibrium. The second part of this definition requires more elaboration. A policy position (A) indirectly beats another policy (B) when policy (A) is majority preferred to (C), which is majority preferred to (B). If this is the case, and as long as policy (A) directly or indirectly beats all *other* alternatives, then policy (A) will form part of the uncovered set. According to social choice theorists, the 'uncovered set' always exists, collapses to the core when the core exists and is centrally located in the issue space (McKelvey 1986, 285; Cox 1987, 408-409).[16] In addition, the uncovered set shrinks as the number and diversity of decision-makers increases (N. Miller 1995, 67). Importantly, there is some experimental evidence that supports the prediction that policies will tend toward the uncovered set (McKelvey and Ordeshook 1990, 121-123).

[16] The core is another equilibrium concept. The core is the set of unbeaten alternatives (Schofield 1985, 7).

As such, although there may be no single stable equilibrium policy, there will be a range of policies that we should expect will eventuate. As McKelvey and Ordeshook comment "...the absence of a core does not imply incoherence or chaos" (1990, 127).

Shepsle and Weingast argue that all of the responses discussed so far fail in their attempts to answer Tullock's question 'why so much stability?' Instead, they want to make a "...compelling case for answering Tullock's question ... with 'Institutional arrangements do it!"(Shepsle and Weingast 1981, 504). They argue that institutional rules can provide 'structure-induced stability' simply by limiting the range of possible exchanges that can take place (Shepsle and Bonchek 1986, 147). The US committee system, for instance, does this by setting restrictions on which legislators can engage in conferences to resolve disputes and by determining which legislators can introduce new bills into the legislature (Shepsle 1997, 326-329). Other procedural rules such as Robert's Rules of Order might similarly encourage stability by ruling defeated proposals out of further consideration (Mueller [1989] 1993, 89).

Importantly, work on structure-induced equilibria does not claim that institutions create policy stability. Group preferences themselves might still fail to select a clear winner. Stability can be expected to result despite this disequilibrium, however, because institutions will not allow cycling to take hold. In other words, a structure-induced equilibrium may exist even though a preference-induced equilibrium does not.

Like the literature on structure-induced equilibria, the last response to the instability results is motivated partly by the desire to add greater realism to rational choice theory. Instead of studying institutions, however, this theory adds more realistic assumptions about candidate knowledge. In short, this response replaces the deterministic account of voting with a probabilistic account. In contrast to the deterministic account of voting and its assumption that candidates and voters have full information about each other, the basic assumption in probabilistic voting is that while voters know the policy positions of candidates, candidates in a two-candidate races are unsure about the voting intentions of

citizens. If this is the case and voter probability functions are continuous and smooth, then it is much more likely than in the deterministic case that there will be a stable policy equilibrium. The nature of the equilibrium (e.g. whether it is at the median or mean of voter preferences) depends on whether voters are assumed to care about differences in expected utility between alternative candidates or the ratio of expected utility or something else. In all cases, however, as Mueller says "...as long as the probability of winning an individual's vote responds positively to increases in the voter's utility from a candidate's platform, then equilibrium can be expected to be found within the Pareto set..." ([1989] 1993, 202). That is, policy will fall within the region where no improvement can be made to any individual without reducing the utility of at least one other individual (Mueller [1989] 1993, 199-205).

While this thesis does not make an explicit judgement on which of these accounts best explains apparent real-world policy stability, chapter 4 does investigate, in the vein of Shepsle and Weingast, whether Australian political institutions encourage policy stability.

1.6 Spatial Theories of Voting

Chapters 3, 4 and 5 of this thesis fall within the general rubric of spatial theories of elections. Because of this and because spatial theories of elections make use of assumptions that are not used in other rational choice work, the first half of this section provides a discussion of several basic assumptions utilised by this approach. The second half of the section switches from assumptions to findings and outlines three of Downs' (1957) most important conclusions.

Before discussing these assumptions, however, it is important to establish that spatial theories of elections are but one half of spatial theories of voting. The other half focuses on voting decisions within committees. For some purposes these scenarios can be treated identically. At other times, however, it makes sense to adopt divergent assumptions. For instance, it might be reasonable to maintain the assumption that voters cast 'sincere' ballots (ballots that are consistent with

their preferences) when discussing large elections. Because the chance of being decisive in these contexts is minimal, there is little reason to vote strategically. In committees, however, where individual votes can have a substantial impact on outcomes, it does not make sense to maintain the assumption that voting is sincere. For this reason, work on committees adopts the behavioural assumption that actors are strategic, while work on elections typically maintains the sincere voting assumption (Enelow and Hinich 1990, 1-2).

The most basic assumption in spatial theories of elections is that parties or candidates occupy spatial positions along some common issue dimensions. This assumption may be more controversial than it first appears because work by Laver and Hunt suggests that there may be substantial disagreement within a community over the way in which an issue is viewed (1992, 18).

This point deserves to be taken seriously. If there is no common agreement on either the relevant policy dimension or the rankings of options along such dimensions, then spatial models are in difficulty. At the same time, it is important to insist that spatial theories do not assume that individuals agree in their assessment of alternatives, but instead that actors have a common view of the issue dimension. Moreover, intuition would seem to support the notion of commonly understood issue dimensions and policy positions. That is, part of the reason for the prevalence of the left-right metaphor is that it communicates some shared longstanding understanding of politics.

Importantly, there is some empirical work that suggests the ongoing relevance of the left-right issue dimension. For instance, Huber and Inglehart suggest that the language and idea of the spatial metaphor is dominant world wide, even though the meaning of these terms differs across time and space (Hubert and Inglehart 1995, 90). Given this empirical work, it does not seem unreasonable to go with intuition and assume, because voters must form some perception of party positions and because the evidence on which to base those perceptions is available equally to all, that voters develop roughly similar perceptions. With this assumption, it is possible to draw a single preference map that captures voter

views, rather than many preference maps, as would be necessary if there were no agreement on the issue dimension.

Implicit in the foregoing discussion is a second assumption - that policies matter to voters and that, to a large degree, voters cast their ballots on the basis of policy concerns. This implies both that politicians believe that policy is important to voters and that there is some sort of connection between party platforms and final policy outcomes. At first sight, this assumption appears to be hopelessly ill-conceived. After all, survey results since the 1960s have repeatedly shown that voters are poorly informed about even the most significant issues (Graetz and McAllister 1994, 328-329). On the policy implementation side, the connection between votes and policy outcomes is often downplayed by many mainstream political scientists who focus instead on the policy-making role of courts, pressure groups, legislatures and bureaucracies.

There is one general and three specific responses to this set of criticisms. In general terms, it is clear that there is some truth in this criticism. By design, spatial theories of elections, and the rational choice approach generally, miss much that is important in voter decision-making and policy implementation. In doing so, however, this approach attempts to bring attention to relationships that might otherwise be obscured. In addition, it is clear that whatever factors influence the thinking of individual voters, it remains true that parties and politicians go to the polls with bundles of policies. If policies are unimportant in the decisions of significant numbers of voters, then it is a mystery why parties still present policy packages to voters. While explanations that focus only on policy concerns cannot explain all of politics, they might grant some insights. For this reason alone, the rational choice focus on policy seems warranted.

A second response argues that the assumption that individuals cast their ballots on the basis of policy concerns neither implies that voters are well-informed about policy, nor that voter decisions are uninfluenced by factors such as personality. Instead, the personalities of leaders might serve as useful shortcuts for citizens without the time or interest to further investigate policy platforms. In addition, Downs' work on rational ignorance, discussed below, explicitly argues that

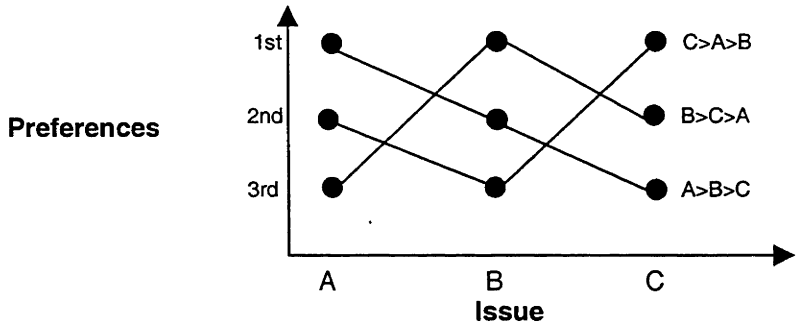
rational individuals might sensibly choose to invest very little time and energy in the voting decision, given that the likelihood that any individual vote will have an impact on the outcome is trivially small. As such, the assumption that voters cast their ballots on the basis of policy concerns is consistent with findings that voters have little knowledge or interest in political issues.

On a related and third point, recent work that follows in this Downsian tradition makes the point that rationally ignorant voters may make the same decisions with minimal information as they would if well informed (McKelvey and Ordeshook 1990, 116-117). In this way, the opinions of lobby groups and the character of political leaders might provide effective signals to ill-informed voters about policy issues (Wittman 1989, 1400-1402). Given these responses, the focus on policy concerns seems justified.

The assumptions discussed so far are the most basic of those utilised by rational choice theorists. More controversial are assumptions that determine the structure of individual preferences over policies. Following from the rationality postulates described earlier, it is clear that voters in these models are assumed to have, and to know, their preferences over policies. A more controversial assumption is that voters have single-peaked preferences. This means that citizens prefer options that are closer to their ideal over those that are further away. Looking at figure 1.3 and its representation of the standard left-right dimension, a voter with preferences of the form A>B>C or B>C>A has single-peaked preferences. In contrast, preferences of the form C>A>B are not single-peaked because A is preferred to B even though B is closer than is A to C.[17]

[17] For a more formal definition of single-peakedness, see N. Miller (1995, 30).

Figure 1.3: Single-Peaked Preferences



Single-peakedness generalises over multiple issues to imply that bundles of policies that are closer to one's ideal policy combination are preferred over bundles that are further away. Preferences of this type are described as euclidean, where this means that "distances on different policy dimensions are traded off in a manner that is directly analogous to the trading off of distances in physical space"(Laver and Hunt 1992, 18). A direct implication of euclidean preferences is that individuals have circular indifference curves, as in figure1.4.

Figure 1.4: Euclidean Preferences

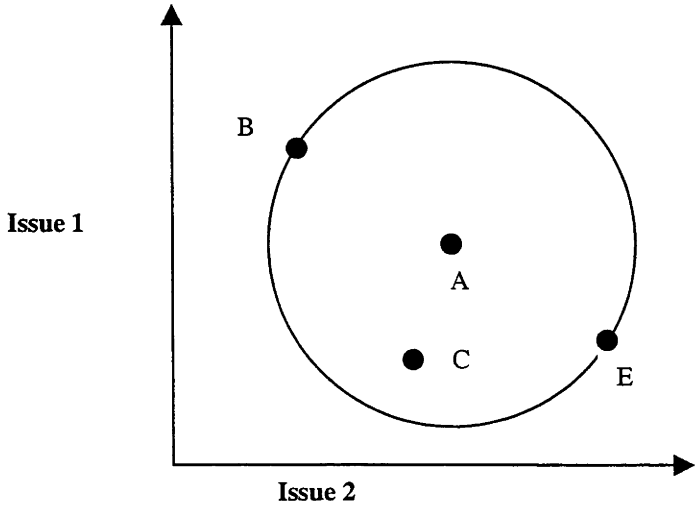


Figure 1.4 maps individual A's preferences over all possible combinations of issues 1 and 2. If A's favourite combination is at A and she has euclidean preferences, then we know how she will rank all other alternatives in the policy space. This is because, by definition, we know that A prefers options that are closer to A over options that are further away. All that is necessary to determine A's preferences between two options, is settle which policy bundle is, in a spatial sense, closest to A. The fact that voter A has euclidean preferences also means that she has circular indifference curves that radiate out from A. By construction, A is indifferent between all policy combinations that fall on the indifference curve in figure 1.4. So, for example, because option C is closer to A than both options B and E, C is preferred over these alternatives.

The euclidean preference assumption is adopted partly because it makes analysis more tractable. At another level, however, the logic of euclidean preferences makes sense to people exposed to economistic thinking. Individuals with preferences of this form trade options off against each other in a way that disregards the content of these options because, in simple terms, being closer to one's favourite option is always better. Importantly, this tradeoff need not be one for one, as in figure 1.4. Instead, we can readily model the implications of different rates of tradeoff. Such changes only effect the shape of the indifference curves.

It is relatively easy to conceive of preference forms that are non-euclidean. Institutional requirements, for instance, may ensure that decisions must be taken in a given order. As an example, consider a judge who must first decide, along with other judges, whether an individual is guilty or innocent and, on the basis of this decision, the proper sentence. Because decision making in this scenario occurs in two stages, some judges may have preference orderings that are not captured by the euclidean assumption. Imagine, as an example, that an individual judge believes that the defendant is not guilty. She argues that the defendant is not guilty, but is unable to convince the other judges. They remain convinced that the defendant is guilty. The decision is made by the group that the defendant is guilty. At this point, the judge has two options: to argue in favour of a lenient or harsh sentence. We might expect that the judge, acting on individual conscience,

would make a case for leniency – if preferences are euclidean then the judge most prefers that the defendant is released, next prefers that she receives a light sentence and last prefers that she receives a harsh sentence. This preference ranking makes sense. At the same time, there is an alternative non-euclidean preference ranking that makes sense because of the structure of decision making in this scenario. That is, it is conceivable that the judge, still unconvinced that the defendant is guilty, but respectful of the decision made by her peers, favours a harsh penalty because she believes that anyone convicted of this crime deserves severe punishment. In this case, the judge's preferences are for release first, conviction with a heavy sentence second and conviction with a light sentence third. These preferences are not euclidean.

The example given here of non-euclidean preferences is admittedly specific. Perhaps this is a rare example or perhaps, on the contrary, euclidean preferences are more common than non-euclidean preferences. Unfortunately, we do not know which of these conclusions is correct (Laver and Hunt 1992, 22). For this reason, and because of convention, this thesis makes cautious use of the euclidean preference assumption.

The remainder of this section outlines three findings from Downs' *An Economic Theory of Democracy* that serve as the focus of many spatial theories of politics. First, and perhaps most famously, the assumptions outlined above, and others, led Downs to develop the median voter model and the conclusion that parties in a two-party race over a single issue will be driven by the forces of competition to represent the policy preferred by the median voter of the electorate (Downs 1957, 114-141).[18] Second, as mentioned above, if voters do vote, then it may be rational for them to expend minimum time and effort gathering information about party policies (Downs 1957, 239-276). This is Downs' rational ignorance hypothesis. Third, because the probability that any individual's vote will decisively impact on the policy outcome is minute, it may be rational for voters to abstain, even in circumstances where they are not indifferent between the policies of competing parties (Downs 1957, 265-266).

[18] Chapter 4 spends considerable time on the median voter theorem.

In algebraic form, it is rational for voters to abstain from voting when PB - C < 0, where P= probability that an individual vote will be decisive, B = difference in expected utility associated with the implementation of the policies of each of the parties, C = cost of voting.

It is clear from this formula that if P is trivially small, as in most elections, then the cost of voting (registration, getting to the poll, waiting in line, etc) will almost always be higher than PB. Given this, we should expect that few citizens will bother to vote. The paradox is that so many people do vote. Rational choice theorists have offered a range of divergent solutions to the paradox. One idea is that the act of voting provides benefits in itself, such as a sense of civic virtue.[19] This suggestion might be right, but it has been criticised because it arbitrarily steps outside the rational choice paradigm (e.g. Ferejohn and Fiorina 1974, 525; Mueller [1989] 1993, 351). Another suggestion comes from Ferejohn and Fiorina (1974). They argue that people vote because they follow a minimax regret strategy. In other words, voters are motivated by the desire to minimise feelings of regret. As Ferejohn and Fiorina state, a person following a minimax regret strategy expresses feelings such as the following "My God, what if I didn't vote and my preferred candidate lost by one vote? I'd feel like killing myself" (1974, 535). If voters have these feelings, then the regret associated with abstention when their vote might have been decisive is sufficiently large that the best strategy may be to always vote even if their vote is not decisive.

A third, very different, answer to the paradox comes from Brennan and Lomasky (1993). They suggest that because the likelihood of casting a decisive vote (P) is trivially small, voters are freed to discount instrumental concerns over B and to focus instead on the intrinsic, or expressive, benefits associated with a particular party or candidate. These intrinsic concerns might range from the personality of leaders to ideological issues and moral beliefs. As Brennan and Lomasky put it, voting may be more like cheering for a team than paying for a good or service (1993, 33-37). Like cheering for a favoured team, voting has an expressive, rather

[19] In *The Economic Theory of Democracy*, Downs gives an answer of this form, despite calls throughout the book to resist such reasoning (McLean 2000, 655).

than instrumental, impact. It is activity that has value in terms of showing support and solidarity, rather than because it brings about a particular outcome.

1.7 Conclusion

While this chapter has outlined some of the most important findings in rational choice theory, it is far from comprehensive. Given that large textbooks are devoted to each of these sub-fields,[20] however, partial accounts are inevitable in a small introductory chapter. Instead, the chapter highlighted both some of the key elements and the diversity of rational choice theory. This diversity is such that it makes it difficult to conclude on a set of characteristics shared by all rational choice theory. Work in the field is better characterised as sharing some, but not always the same, characteristics, where the most important of these include the use of methodological individualism, formal models, equilibrium analysis, deductive theorising and rationality assumptions.

Diversity in rational choice assumptions and characteristics is echoed in the political goals of rational choice practitioners. This is most apparent in the contrast between Wittman and other writers associated with the Chicago and Virginia Schools. The contrast is less stark, but also clear in the comparison between social choice theory and spatial theories of elections, on the one hand, and Chicago and Virginia School theory on the other. All use equilibrium analysis, methodological individualism, deduction and equilibrium analysis, but reach contradictory conclusions about modern democratic politics. Specifically, members of the Chicago and Virginia Schools are generally more committed than other rational choice theorists to the self-interest assumption as an accurate reflection of human motivation and to research that highlight examples of government failure.

[20] See, for instance Shepsle and Bonchek (1997) for an introduction to spatial theory, Enelow and Hinich (1990) for an account of recent developments in spatial theory, Ordeshook (1986) and N. Miller (1995) for introductions to social choice theory, Buchanan and Tollison (1984) for developments in the Virginia School, Samuels (1993) for developments in the Chicago School, Mueller ([1989] 1993) and Riker and Ordeshook (1973) for more general introductions.

It is because I am interested in topics discussed by social choice theorists and spatial theorists and because I am cautious about use of the self-interest assumption, that this thesis draws more heavily from the latter fields than from the Chicago and Virginia Schools. Before delving into any detailed examination of rational choice theory in an Australian context, however, the thesis examines, in the next chapter, a series of criticisms that have been directed against rational choice theory. In doing so, the chapter establishes that, in spite of these criticisms, rational choice theory warrants further investigation.

2 RATIONAL CHOICE THEORY'S RECEPTION

2.1 Introduction

There are two major debates associated with rational choice theory. Whereas a long-running debate centres on the meaning and accuracy of the rational choice definition of rationality, the more recent debate revolves around Green and Shapiro's book *Pathologies of Rational Choice Theory* (1994). This chapter gives a taste of these, and other, debates concerning rational choice theory. In doing so, the main focus is on internal, rather than external, criticisms. This does not mean that the chapter focuses solely on debates amongst academics who are committed to the field. Instead, external criticisms (those outside the main focus of this work) include those raised by Foucault and others against, for example, attempts to expand human knowledge through the application of science and reason.

Of the full range of critical work directed against rational choice theory, practitioners agree that Green and Shapiro's (1994) *Pathologies of Rational Choice Theory* offers the greatest challenge to the discipline (Wood and McLean 1995, 704-705). It is for this reason that this chapter begins by outlining the main points in Green and Shapiro's argument. With these criticisms clear, the next section details and assesses the range of explicit rejoinders to the book. In doing so, the section highlights trends toward partial universalism and inductive reasoning in rational choice theory.

The last two sections of the chapter examine other controversies in rational choice, starting with debates over the nature of rational choice theory's commitment to thin rationality, defined as utility maximisation. Although the range of criticisms in this field is extensive, only a few of the most important criticisms can be discussed here. The chapter argues that many of these criticisms are better viewed as useful suggestions for the improvement of the utility

maximisation model, rather than as devastating critiques. The last section deals with criticisms of thick rationality assumptions, like power and wealth maximisation. This topic is interesting because rational choice theory's supposed reliance on self-interest takes a central role in some critiques of rational choice (e.g. Lewin 1991, 3-4; Stretton and Orchard 1991, 20; Zey 1992, 14). The discussion here shows that self-interest plays a mixed role in rational choice theory. Of more contemporary importance, however, is the Green and Shapiro critique, discussed next.

2.2 The Green and Shapiro Critique

The central thesis of Green and Shapiro's *Pathologies of Rational Choice Theory* (1994) is that rational choice attempts to develop a universal theory of politics have produced very few non-obvious propositions about politics that withstand empirical scrutiny (1994, x; 1996, 237). Green and Shapiro state their case as "[o]ne encounters arresting [rational choice] propositions that are not sustainable...And one encounters sustainable propositions that are not arresting...But seldom does one encounter applications of rational choice theory that are at once arresting and sustainable" (1996, 236). This failure results directly, they argue, from the method-driven, as opposed to problem-driven, approach taken by rational choice theorists. Green and Shapiro's distinction amounts to the following – a method-driven approach asks 'how can rational choice theory account for this phenomenon?' whereas a problem-driven approach asks 'what causes this phenomenon?' (1996, 238). In turn, the method-driven approach results, Green and Shapiro argue, from the universalist ambitions of rational choice theorists (1996, 263). In other words, practitioners engage in a range of unscientific (or in Green and Shapiro's terms - pathological) behaviour *because* rational choice theorists are committed to the development of a universal theory of politics.

These pathologies, Green and Shapiro conjecture, manifest themselves in at least three ways. First, when faced with contradictory empirical findings, rational choice theorists often resort to post-hoc explanations (1994, 34-38). This means

that practitioners adopt previously unmentioned explanatory variables in an attempt to meet the difference between empirical findings and their own theories. For example, as mentioned in chapter 1, theorists examining the paradox of voter turnout[1] nominate factors varying from civic virtue to the adoption of a minimax regret strategy in order to explain why so many people vote.[2]

Post-hoc theorising is also manifested, Green and Shapiro state, in the choice of 'stylized facts' that rational choice theorists suggest are worthy of explanation. That is, they argue that because practitioners posit 'facts' without testing whether their stylized facts are facts at all, it is commonplace for different theorists engaged in the same debate to posit contradictory stylized facts. For example, different discussants in the debate on party positions in legislatures, for instance, sometimes simultaneously state that the stylized facts to be explained are major party convergence at, and major party divergence from, the median.

There are, for Green and Shapiro, two problems with such post-hoc theorising. They worry, first, that these developments prevent any proper empirical testing. As they see it, post-hoc theorising ensures that theories in rational choice are typically not proved wrong by contradictory evidence. Instead, the existence of a whole host of random factors, some of which appear to fall outside standard rational choice variables, are posited so as to explain contradictory results. As the type of explanations that fall within the category of rational choice theory increases, there is a risk that rational choice explanations will become "...nothing but an ever-expanding tent in which to house every plausible proposition advanced by anthropology, sociology, or social psychology" (Green and Shapiro 1996, 254). An even greater problem for Green and Shapiro is that these and other competing explanations (and the stylized facts mentioned previously) are rarely tested against each other or alternative explanations from outside the discipline. Instead, theorists make claims about the utility of their explanations according to standards of realism or parsimony, values that Green and Shapiro find ill-defined or slippery (1994, 34-38).

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[1] The paradox of voter turnout asks why so many people vote when the probability of casting the decisive ballot in most elections is negligible.

[2] See also Green and Shapiro (1994, 47-71) for an account of some of the many rational choice explanations of voter turnout.

The second pathology highlighted by Green and Shapiro relates to the manner in which rational choice theorists formulate tests. Green and Shapiro argue that because of the large number and range of unobservable variables utilised in rational choice explanations, empirical tests are often impossible (1994, 176). This difficulty is worsened by the parsimonious nature of rational choice models. Models are sometimes either so general that it is difficult to identify the predictions they might yield or are expressly justified in terms of underlying trends that hold regardless of particular empirical examples (1994, 38). This is particularly true, Green and Shapiro maintain, of experimental tests of rational choice findings that "...have been quick to concede the dubious 'realism' of their experiments" (1994, 121).

The third indictment levied against rational choice theory relates to the ways that rational choice practitioners interpret evidence. Green and Shapiro argue that empirical work associated with rational choice theory tends to direct attention toward supportive, rather than contradictory or neutral, evidence. At its most extreme, this behaviour manifests itself in the search for confirming evidence, no matter how isolated and unrepresentative such evidence might be (1994, 42-43). Green and Shapiro argue that Denzau, Riker and Shepsle's (1985, 1121-1125) identification of sophisticated voting by Republicans on the 1956 US School Construction Bill is a good example of this sort of pathology. Briefly, Denzau, Riker and Shepsle argue that legislators were faced with a choice among a) the status quo; b) an unamended bill to increase spending on school construction; and c) an amendment that would direct funding only to non-segregated schools. Denzau et al argue that Republicans with preferences of the form a>b>c voted for option c when faced with a choice between it and option 'b', so as to set up a pairwise vote between option 'a' and 'c'. According to Denzau et al., Republicans voted against their preferences because they knew that option 'a' was more likely to succeed against 'c' than against 'b'. This rare example of strategic voting is often cited. Despite this status, subsequent work argues that this

explanation excludes or overlooks non-conforming facts (Green and Shapiro 1994, 44).[3]

The tendency to search for confirming empirical examples is also apparent in attempts to restrict the domain of study in such a way that contradictory evidence is excluded from analysis by rational choice theorists, without mention of the reasons for such exclusion. Green and Shapiro argue that domain restriction is warranted in cases where there is a rationale or explanation for such restriction. In these cases, limitations on the reach of particular theories provide clarification. As they see it, however, universalist ambitions impel rational choice theorists to stretch the theory as far as possible and to limit the claims of models only when it is clear that the model has significant failures. As such, domain restriction by rational choice theorists is arbitrary (1994, 44-46; 1996, 255).

As mentioned at the beginning of this section, the greater claim of *Pathologies of Rational Choice Theory* is that these pathologies are systematic within rational choice theory and that they result from undue concern to show the universality of rational choice theory. In addition, when these universalist ambitions prove unsustainable, Green and Shapiro contend that practitioners either engage in the pathological behaviour they identify or offer strained methodological justifications rather than admit that rational choice work has less than universal applicability.

2.3 Responses From Rational Choice Theory

Few within rational choice oppose the Green and Shapiro critique entirely. Instead, most accept that rational choice practitioners have previously focused on theory development to the detriment of empirical testing (e.g. Chong 1996, 37; Johnson 1996, 78; Levi, 1995, 326). Interestingly, however, some commentators regard this concession in a dismissive way.

[3] See Krehbiel and Rivers (1985) for a reinterpretation of voting on this bill that explains the result within the context of legislative decision making with incomplete information, rather than strategic voting.

Levi, for instance, says "[t]here is much of interest and even some truth in the claim that rational choice has yet to satisfactorily demonstrate its empirical power. However, this is hardly news." (1995, 326).[4] Whatever the status of these admissions, it is clear that the implications drawn by Green and Shapiro regarding the pathological tendencies of rational choice theory are not supported by rational choice theorists.

This section and the next outline five different responses to *Pathologies*. At least two of these lines of response are apparent in Russell Hardin's comment that "[i]f you wish to show that some theory is defective, you can show that it is internally inconsistent or you can put up an alternative theory that handles its problems better" (1995, 775). One line of response in Hardin's comment asks if Green and Shapiro have a superior alternative to rational choice theory. The validity of this question is examined in greater detail below. For now, however, focus on the first half of Hardin's statement, i.e. that "[i]f you wish to show that some theory is defective, you can show that it is internally inconsistent". Implicit in this statement is the argument that the deductive proofs used by rational choice theorists have the status of analytic truths. That is, by virtue of their structure, Hardin argues, deductive logic or pure theory, have value in and of themselves that Green and Shapiro do not recognise.

There are multiple arguments in favour of the development of pure theory. These include the suggestion that theory development generates a large range of questions, causal mechanisms and research programs that have, in themselves, inspired empirically successful research (Chong 1996, 43; Ferejohn and Satz 1996, 72; Levi 1995, 326). Within the category of empirically successful research that has been inspired by rational choice theory, we might include, for instance, Ostrom's (1990) *Governing the Commons*, Fiorina's (1981) *Retrospective Voting in American National Elections* and Fenno's (1973) *Congressmen in Committees*. Each combines findings and concepts from rational choice theory with other theoretical work (e.g. Fiorina) or uses rational choice theory to illuminate an otherwise empirically driven study (e.g. Ostrom and Fenno).

[4] See also earlier comments by Enelow and Morton (1993, 88), McLean (1986, 377), Monroe (1991, 7) and Tullock(1977, 385) about the empirical weaknesses of rational choice.

For instance, Ostrom explicitly places her empirical study of collective action ([1990] 1996) within the context of Olson's collective action problem, Garrett Hardin's (1968) exposition of the 'tragedy of the commons' and the prisoners' dilemma problem. Similarly, Fiorina places his empirical investigation into voting within the context of Downs' work. Rational choice theory deserves some credit for these empirical successes, even if these examples do not fall squarely within its rubric.

In addition, pure theory provides the intellectual tools and structure for subsequent applied theory. For example, Cox's (1997) empirically detailed study of strategic voting takes pure social choice theory as one of its starting points (Cox 1997, 11). While it draws from a different source of literature, the same can be said of Tsebelis and Money's (1997) examination of bicameralism. The latter combines a formal theory of bicameral parliaments with a detailed empirical examination of the institutional details of different real-world parliaments.

Green and Shapiro's response to this argument is roughly paraphrased as 'given its empirical deficiencies, has this impact done us any good? Perhaps the new research programs inspired by rational choice theory just lead political scientists down a series of unfulfilling paths' (Green and Shapiro 1996, 266). While Green and Shapiro are right to point out that the history of social science is filled with new questions and concepts that have proved to be conceptually powerful and empirically incorrect, this criticism misses the mark when directed against rational choice theory. In addition to the empirical and theoretical benefits, already highlighted, the fact that rational choice theory provides part, if not all of the explanation, deserves greater notice. So, for instance, the collective action literature may not accurately represent all collective action, but Green and Shapiro admit that the literature does provide powerful insights into some of the problems associated with collective action (1994, 97). As Dowding says, while the logic of collective action does not imply that collective action is impossible, it does alert us to the possibility that collective action might be difficult (Dowding 1997, 271). As such, the task facing rational choice theorists is not the rejection of its core concepts, but a reassessment of its scope, something discussed in more detail below.

The second line of response, also apparent in Russell Hardin's quote, amounts to the argument that rational choice may not be perfect, but that it is better than anything else of similar generality on offer. This is the most common rational choice response to Green and Shapiro (Chong 1996; Elster 1989, 29; Johnson 1996, 81; Shepsle 1996, 217). According to this argument, rational choice theory should retain a prominent position in social science explanations until, and unless, another theory is shown to provide more accurate explanations and predictions. As long as Green and Shapiro themselves (1994, 183-185) admit that they are unable to supply such a general theory, the argument continues, rational choice retains its position in the social sciences.

Green and Shapiro disagree. They argue that this line of defence assumes that rational choice theorists have previously shown the empirical superiority of their own approach over competing explanations. *Pathologies* shows, however, that rational choice theorists have not yet proved the empirical superiority of their work. As such, to make claims of superiority in the face of the *Pathologies* critique, Green and Shapiro argue, is to engage in hubris (1996, 256).

As Cox (1999, 164-165) says, the response from Green and Shapiro seems right. Rational choice cannot claim a superior status, without first investigating and assessing the value of alternative explanations. Given this concession, however, what other responses are left? Cox's main dispute is not with Green and Shapiro's definition of empirical success, but with their definition of rational choice theory. As he says "[i]f the main goal of *Pathologies* was to demonstrate the poverty of rational choice theory's empirical accomplishments, then it should have focused on models with reputations for strong *empirical* performance." (1999, 152; italics in original). Implicit in this response is the argument that because of the diversity of rational choice models, we should not infer from the failure of one model that the theory as a whole is faulty. Instead, we should expect that some models will poorly predict or describe empirical regularities and that others will have greater success.

Given this judgement, Cox is not surprised by Green and Shapiro's finding that the models they examine are empirically unsupported. Two of the fields examined by Green and Shapiro, i.e. majoritarian cycling and the paradox of voter turnout, have poor empirical reputations in rational choice theory. In fact, the poor empirical performance of these literatures partly explains why they have attracted so much attention. Two other fields examined by Green and Shapiro, i.e. spatial models of candidate competition and structure-induced equilibrium models, have strong theoretical, not empirical, reputations. The only field of rational choice theory discussed by Green and Shapiro that does have a good empirical reputation, Cox says, is the Olson model of collective action (1999, 153).[5] In keeping with Cox's injunction to test deductive rational choice accounts that have a good empirical reputation, he makes a number of suggestions, including models of coalition formation like those from Laver and Schofield (1990) and Laver and Shepsle (1994) and applied legislative models including Tsebelis and Money (1997) and Cox and McCubbins (1993).

A proper assessment of the empirical contributions of these diverse examples of rational choice theory is beyond the scope of this chapter. Whether Cox is right in his judgement on the empirical success of these examples of rational choice theory will be judged by others. For this reason, Cox's argument in this regard is noted, but is not mentioned in the ensuing discussion. Despite this, it is clear that if Cox is right, then the other responses to Green and Shapiro's critique gain substantial support.

While Green and Shapiro (1996) do not explicitly respond to all of Cox's suggestions[6], they do discuss the status of some of these works and conclude that their views regarding the empirical weaknesses of rational choice theory are unaffected. The rationale for their unchanged position is that there is no single example from the list of rational choice successes supplied by rational choice respondents in *The Rational Choice Controversy* (1996) that is properly characterised as rational choice theory *and* empirically successful. Instead, they

[5] I am not sure that collective action has a very good empirical reputation in rational choice, either. See, for example, comments by Dowding (1997, 271) and McLean (2000, 655-656).

[6] Green and Shapiro's response preceded the publication of Tsebelis and Money (1997).

argue that the examples of empirical successes highlighted by respondents like Shepsle, Ferejohn and Satz, Schofield and Fiorina "...exhibit weak connections at best with rational choice theory" (1996, 244). Even if Green and Shapiro are correct in their judgement that these examples fall outside the bounds of rational choice theory strictly defined, it does not follow that the approach deserves no credit in their development.

It is important to mention the fourth line of response to *Pathologies*. For Diermeier, "...the so-called pathologies are perfectly normal characteristics of successful theories in the empirical sciences" (1996, 61). This reasoning contains two different arguments. The first argument is that Green and Shapiro's standards are so high that even the most successful scientific work is characterised by pathologies. Diermeier argues, for instance, that physicists working in Newtonian physics engaged in arbitrary domain restriction when they realised that Newton's theory of light could not explain the orbit of the planet Mercury. Scientists did not understand why Newton's theory did not hold, but nonetheless maintained the theory in the face of this puzzle because it "...would have been foolish to give up Newton's theory, which worked well in most areas, just because of one anomaly" (Diermeier 1996, 66). In this regard, Diermeier argues, rational choice theory is in good company. Similarly, Diermeier argues that the high level of unobservable variables utilised by rational choice puts it in the company of highly successful scientific studies (1996, 64).

The response from Green and Shapiro to Diemeier's reasoning has already been mentioned. They argue that Newton's theories gained their pre-eminent position in physics after proving their empirical superiority over alternative explanations. Because of their proven position, it made sense for physicists to hold onto Newton's theories until they discovered another superior theory. Rational choice theory, Green and Shapiro convincingly argue, has not achieved this status in political science and, hence, does not deserve the privileges granted to Newtonian physics.

The second part of Diermeir's response to Green and Shapiro is stronger, partly because it does not rely on analogies between rational choice theory and scientific

method. Instead, along with Chong, Diermeier argues that many of the pathologies highlighted by Green and Shapiro are actually examples of good social science practice. For Chong, post-hoc theorising shows willingness on the part of rational choice theorists to attempt to improve their explanations in the light of new evidence (1996, 45). The re-specification of known findings in terms of rational choice concepts is similarly justified because re-description attempts to specify the causal mechanisms behind particular phenomena (1996, 40).

Whether Chong or Green and Shapiro are right in their characterisation of this sort of behaviour depends to some degree on the universalist claims of rational choice practitioners. If rational choice theorists are fully committed to universalism, then Green and Shapiro's interpretation of post-hoc theorising is likely to be correct. If not, then Chong's account of post-hoc theorising gains greater plausibility. The following section further investigates rational choice theory's commitment to universalism and, in doing so, develops the most convincing line of response to Green and Shapiro's criticisms.

2.4 Universalism

As Green and Shapiro repeatedly state, their criticisms of rational choice theory stem not from its techniques or assumptions, but from its universalist ambitions. In this way, their criticisms extend to all general theories of politics. The history of such general theories in political science, Green and Shapiro argue, tells us that none of these theories are likely to live up to the universalist ambitions of practitioners (1996, 268). The problem for Green and Shapiro, however, is not just that rational choice theory is likely to fall short of the ambitions of its practitioners. The more serious concern is that the ambition to develop a universal theory of politics leads rational choice theorists to engage in pathological behaviour. If rational choice theorists were less committed to this vision of scientific progress, Green and Shapiro conjecture, then such pathological behaviour might be less common (Green and Shapiro 1996, 239).

As intimated in the preceding section, the response from rational choice theorists to Green and Shapiro's criticisms of the theory's universalist ambitions are mixed. On one extreme, Cox says that "I have never thought that rational choice theory (formal or otherwise) provides a universal theory of all human behavior" (1999, 151). Bates et. al. (1998) express the same sentiments when they say that attempts to build a universal theory of the social sciences are based on "...an 'over-confident' and naive vision of the [social] sciences" (Bates et al 1998, 11). At the other extreme, Schofield says "In my view, what gives rational choice theory coherence is precisely that it *is* an attempt to construct a grand theory of human behavior" (1996, 190 italics in original). Similarly, Riker ([1962] 1975, viii-ix) hoped that rational choice theory would yield a general theory of politics. There are, in between these two extremes, a range of partial and segmented versions of universalism, some of which are discussed below.

Like Elster (1986, 27), Chong argues that political scientists should see how far rational choice theory takes us before trying alternative approaches (Chong 1996, 57). Underpinning this injunction is the belief that "...individual actions are seldom perfectly rational, but there is an essential degree of rationality in most behaviour" (1996, 39). This does not imply that utility maximisation is expected to dominate other considerations (e.g. loyalty, habit, friendship etc) all of the time. Chong's position is better understood as a form of partial universalism,[7] where this amounts to the belief that while we cannot expect that rational choice will explain all behaviour all of the time, we can expect that it will explain some element of behaviour most of the time.

Pettit (1995) offers another version of partial universalism. He argues that utility maximisation has a virtual presence in human thinking. That is, while considerations relating to utility maximisation play no role in a range of circumstances, they gain a presence in human thinking if the costs of following other motives become too high. If this happens then utility maximisation loses its virtual presence and take on, instead, a real presence in human calculations. Pettit admits that this picture of rational choice does not tell us exactly when rational

[7] This chapter follows Green and Shapiro's usage of the terms 'segmented' and 'partial' universalism (1994, 26-28).

choice explanations will prove useful. Nonetheless, he argues that it does tell us that non-utility maximising behaviour might prove long lasting because the costs associated with such behaviour are not sufficient to upset the virtual presence of utility maximisation (Pettit 1995, 324).

Another, more radical form of universalism holds that rational choice theory explains some areas of politics well and others poorly. This position is described as segmented universalism. This stance is apparent in Wood and McLean's comment that rational choice theorists should "concede that ground [which they are likely to lose] and defend their approach more robustly on territory they are likelier to hold."(1995, 706) For Wood and McLean, this position amounts to concessions on areas such as the paradox of voter turnout and the continued defence of rational choice accounts in other fields.

Ferejohn and Satz provide a more systematic account of the circumstances in which rational choice explanations might prove most successful. They draw an analogy between rational choice and economic theory and argue that both theories provide better explanations of behaviour when competition constrains the choices of individuals (1996, 78). Along the same lines, Fiorina suggests that rational choice explanations are most successful when the stakes attached to individual decisions are high and the numbers of participants are low (1996, 88). In terms of earlier discussions, voting in large-scale elections is thus poorly explained by utility maximisation because of the large number of actors involved and the low costs associated with voting.

Brennan and Lomasky's (1993) model of expressive voting, discussed in the previous chapter, also posits a model of utility maximisation that holds in some circumstances, but not others. They argue that instrumental behaviour plays an important role when the probability of being decisive in any particular activity is high. Accordingly, the purchase of goods for private consumption is rationally governed by instrumental logic. If the probability of being decisive is low, as in most elections, then it is rational for individuals to follow non-instrumental concerns. The failure of the instrumental model to explain the paradox of voter turnout is thus explained by the very low probability that any individual will be

decisive. Given this fact, it is rational for some individuals to discount the instrumental concerns that would lead to non-attendance and to follow expressive concerns (Brennan and Lomasky 1993, 22-24). This model is superior to that provided by Fiorina because it provides an account of both when we should expect that instrumental accounts will fail and the outcomes we might expect when it does fail.

A third, and different, response comes from Friedman (1996). He rejects universalism entirely and argues that no theory, including rational choice, can achieve universal applicability without explanations that tend toward tautology (1996, 15). Instead, Friedman supports an ideal-type approach to social science. Under this approach, rational choice theory's deductive models should be viewed as ideal-types that are true by virtue of the ceteris paribus conditions they contain and their internal logic. The only way to test the applicability of these ideal-types, Friedman argues, is to engage in systematic empirical testing. In undertaking these tests, however, social scientists should expect neither that a particular ideal type will explain all behaviour, nor that the success of an ideal type in a particular scenario will be generalisable (1996, 17).

Apart from its endorsement of deductive reasoning, Friedman's ideal-type approach is very similar to the model of research supported by Green and Shapiro. The latter argue that the past and present empirical failures of general theories in political science warn us that there may not be any general laws awaiting discovery (1994, 184). If this is the case, then the best that political scientists can achieve are middle-level generalisations that emphasise the role of a host of empirically tested variables (1996, 253).

These accounts give some idea of rational choice theory's varied commitments to universalism. Of these accounts, Chong's partial universalism, Friedman's ideal-types and Green and Shapiro's middle-level theorising all suffer from similar defects. None of these approaches tell us anything about the conditions under which particular theories are likely to prove successful. In contrast, the forms of segmented universalism, mentioned previously, explicitly attempt to set out the circumstances in which rational choice accounts might prove most useful. In

doing so, each offers a firmer picture of how explanations of different phenomena fit together. While none of the particular models discussed here have as yet gained a pre-eminent place in rational choice, there is some evidence in favour of an expressive voting model, like the one put forward by Brennan and Lomasky (Feigenbaum, Karoly and Levy 1988). Given this empirical support and the arguments outlined above, this version of universalism appears to provide a more profitable avenue for further research because it recognises rational choice theory's empirical failures without losing its explanatory structure.

Independent of whether segmented universalism is likely to prove useful, three conclusions follow from this trend away from universalism. First, Green and Shapiro's critique loses much of its force if practitioners are not, in fact, committed to universalism. In this new light, Green and Shapiro's argument that practitioners engage in post-hoc theorising, so as to 'save' the theory is less convincing. Instead, the trend towards segmented universalism supports Chong's conjecture that rational choice theorists engage in post-hoc theorising so as to improve the theory. Second, this less-than-universal account is compatible with the pluralist approach advanced in the introduction. That is, the move away from claims of universalism is consistent with the argument that rational choice explanations complement, rather than replace, existing social science explanations.

Third, if the trend away from claims of universalism is right, then rational choice theorists share a common task with Green and Shapiro. That is, all social scientists share the task of developing a meta-theory that details when, where and why particular theories, including rational choice, provide convincing explanations of politics. While Green and Shapiro's criticisms contribute to this effort in the sense that they catalogue the theory's failures, the task of determining, in a constructive manner, the theory's reach may be more difficult.

2.5 Deductive reasoning

Green and Shapiro also direct criticism against the use of deductive reasoning. As outlined above, they argue that if there are no general laws of political science to be discovered, then there is little reason to continue with deductive, rather than inductive, techniques. Green and Shapiro state their case in the following way:

> The difference between inductive and deductive approaches comes down, then, to what one is left with in the likely event that one's hypothesis proves empirically inadequate: a rich supply of information about politics and a grasp of the going attempts to understand it, or a bunch of algebra that is unlikely to impress anyone in the math department (1996, 268).

The rational choice response to this line of criticism is not explicit. Shepsle and Bonchek (1997) justify their support for deduction over induction on the basis that while induction may be useful in highlighting empirical regularities and making predictions about the likelihood of future events, induction alone can not provide explanations of politics. This is because explanations necessarily include an account of how and why particular variables are correlated, not just that they are correlated. According to this logic, also advanced by Riker, deductive reasoning is a crucial component in all explanations because it answers the 'how' and 'why' (Riker 1990, 167-168; Shepsle and Bonchek 1997, 6-8).

Other practitioners back away from claims regarding the centrality of deductive reasoning to rational choice theory. For instance, Shepsle (1996) offers a different justification for deductive reasoning in his response to Green and Shapiro. There, he says that while no one could disagree with calls for increased empirical testing, the use of deductive logic reflects the comparative advantage of rational choice practitioners in theory development (Shepsle 1996, 219). In this response, deductive logic is justified not in terms of explanatory success, but because of the necessary division of labour among academics!

Cox (1999) offers a different perspective on the debate between inductive and deductive research. In fact, he disputes Green and Shapiro's characterisation of a dichotomy between inductive and deductive research entirely (1999, 151-152). In contrast, Cox argues that social science research generally, and rational choice theory in particular, fall along a continuous scale that varies from the highly formal and deductive at one end through to highly inductive at the other. Given this, Green and Shapiro's examination of formal and deductive rational choice is bound to provide a partial account of rational choice theory's empirical success because it excludes the successes of more inductive rational choice theory (Cox 1999, 150). Within this category of inductive rational choice theory, Cox includes efforts by Fiorina (1981), Fenno (1973) and Ostrom (1990), work described previously in this thesis as empirical work inspired by rational choice theory. This category might also include work by Bates et al (1998). The latter describe their research as an attempt to combine descriptively accurate accounts of politics with rational choice reasoning (1998, 13-14).

Cox's attempt to extend the definition of rational choice theory to cover inductive, as well as deductive, research has some value. In particular, this move provides another response to Green and Shapiro's criticisms. There is, however, some danger associated with an expansion of the definition of rational choice work to include inductive, as well as deductive, research. Most pressing is the concern that such a move supports the claim that "...rational choice theory is nothing but an ever expanding tent in which to house every plausible proposition advanced by anthropology, sociology or social psychology" (Green and Shapiro 1996, 254). It is in order to avoid this criticism that I prefer to maintain deductive reasoning as a key element within rational choice theory. While this decision necessarily excludes some good empirical work, like that mentioned above, from any tally of rational choice theory's empirical successes, it does not imply that rational choice theory deserves no credit in their formulation. Instead, the approach still merits credit as the source of new questions and research programs that inspire good empirical analysis.

2.6 Rationality

Rational choice theorists make use of two different types of rationality assumption. The first, described as 'thin' rationality assumptions, entail the premise that individuals maximise their utility in keeping with the axioms of completeness and transitivity. The second type of rationality assumptions, described as 'thick' assumptions are more demanding and typically involve the conjecture that behaviour is motivated by self-interest. The current section examines criticisms of the thin rationality assumption and leaves criticisms of thick rationality until the next section.

In spite of its prized status within rational choice theory, the thin version of rationality is subject to a range of criticisms. Ordeshook (1982) argues that it might be difficult to fulfill both of the conditions of weak rationality. The transitivity postulate requires, for instance, that individuals can consistently rank alternatives, even if alternatives are not very different. As an example, Ordeshook's highlights the difficulty of consistently ranking one's preferences between a hot drink with one teaspoon of sugar and a hot drink with one teaspoon plus one extra grain of sugar (Ordeshook 1982, 12-13). The example is trivial, but it makes the point that the transitivity postulate might be more onerous than it first seems.

Another criticism highlights apparently common behaviour that falls outside the model of utility maximisation. One of the best known of these proponents of this criticism is Elster. Elster's list of examples highlighting the failures of rationality is long and involved, but all of his examples point to circumstances in which utility maximisation is unlikely to prove a good model of human decision making. For the purpose of this chapter, however, Elster's emphasis on two distinctly different types of human behaviour is worthy of mention.

The first of these is described as 'weakness of will' and is the phenomena apparent when an individual knows what is best for herself, decides to follow this

action and then, at the last minute, acts in a contrary (and immediately regretful) manner. Examples include attempts to give up addictive habits, like smoking and drinking. Because utility maximisation implies that underlying preferences are revealed through the act of choosing, the moment of weakness of will is taken to indicate true preferences. Elster argues, on the contrary, that the momentary lapse of will should be characterised as no more than a fleeting weakness. What weakness of will shows for Elster is that the nexus between desire and action may be substantially lessened in ordinary circumstances and that "[s]ometimes people fail to choose what they believe to be the best means to realize their desires" (Elster 1989a, 36).

A second type of human behaviour that falls outside the standard definition of rationality is known as 'adaptive preference formation' (or sour grapes). Individuals engage in adaptive preference formation when they alter their beliefs about a particular outcome so as to make that outcome more psychologically palatable. The idea behind adaptive preference formation is that individuals may, over time, downgrade enthusiasm for positive, but unlikely, outcomes and increase their enthusiasm for events that were previously viewed negatively, but are increasingly, likely. For example, I might study very hard in the hope that I get the grades to qualify as a dentist. If, after years of effort, I fail to reach this dream and then decide that dentistry is not a great career anyway, then my change of preferences might be described as a change due to 'sour grapes'. If this sort of preference change is common, then the problem for rational choice theorists is that preferences may change in systematic ways simply because the likelihood of certain outcomes changes. In this case, the connection between preferences and actions is weakened by concerns about the likelihood of particular outcomes (Elster 1982; Elster 1989b, 20-23).

A similar type of behaviour is described as 'cognitive dissonance reduction'. Akerlof and Dickens (1982) argue that people tend to 'correct' their views about the world if these views are inconsistent with underlying beliefs about themselves. Individuals alter their beliefs in this way, Akerlof and Dickens argue, because most people dislike knowing their beliefs are contradictory. They cite, as an example, the tendency of workers who know they are entering dangerous

industries to downplay the degree of danger associated with their work. Indeed, Akerlof and Dickens claim that many workers downplay the possibility of accident to such an extent that they fail to make use of new safety equipment when it becomes available. Akerlof and Dickens state: "[w]orkers make a choice about whether to believe the activity is safe or not safe"(1982, 308). Believing that the workplace is safe reduces the "..unpleasant feelings of constant fear or unsettling doubts about how wise it was to take such a dangerous job" (1982, 308). At the same time, there is an obvious risk associated with such a strategy if it prevents individuals from taking proper safety precautions. What is more, as with adaptive preference formation, if cognitive dissonance is widespread, preferences and actions may give an unreliable picture of human beliefs.

A third type of behaviour that does not easily fit the rational choice model of rationality centres on the importance of the ways in which choices are described (or 'framed').

Sugden depicts the problem as follows:

> We may take a single choice problem and describe (or 'frame') it in two different ways, such that almost anyone who saw both descriptions would, on reflection, agree that they were logically equivalent. But if people are presented with the problem separately, with some interval of time between so that the logical equivalence of the problems is concealed, they may respond in systematically different ways to the two descriptions (Sugden 1991, 779).

Examples that highlight the impact of framing on preferences include studies showing that people are risk averse when faced with the prospect of winning money and risk loving when faced with the prospect of losing money (Quattrone and Tversky 1993, 159). So, for example, when faced with a choice between $100 for sure and a lottery in which there is a 10% chance of winning $1000 and 90% chance of winning $0, many people prefer the $100 for sure over the lottery with the same expected value, but greater risk. If, however, people are faced with

the choice of losing $100 for sure and playing a lottery where the payoffs are 10% chance of losing $1000 and 90% chance of losing $0, some of the same people prefer the lottery to the sure loss. On face value, the problem for rational choice theorists is that these preferences change from risk aversion to risk loving for no reason other than that the options have been differently described (Tversky and Kahneman 1990, 64-65).

A fourth threat to this definition of rationality is found in Herbert Simon's work on bounded rationality. Simon argues that because of limitations in human cognitive abilities, individuals most often make decisions on the basis of a range of heuristic, or 'rule-of-thumb' devices. The contrast drawn by Simon is between substantive rationality, as captured in thin rational accounts of optimising behaviour, and bounded rationality, where decisions under the latter are restricted by the inherent limitations of individual decision making capacities (Simon 1985, 294). Under the assumptions of bounded rationality, computational and time limitations ensure that the "search is incomplete, often inadequate, based on uncertain information and partial ignorance, and usually terminated with the discovery of satisfactory, not optimal, courses of action" (Simon 1985, 295). According to Simon, bounded rationality gives both a more accurate picture of human behaviour and one that is incompatible with utility maximisation (Simon 1985, 297).

There are three general responses to these criticisms. The first is to ask the frequency of these failures in reasoning. The framing literature tells us that humans face cognitive limits in their calculations, but does not tell us how common these cognitive failures are. Instead, the unusual structure of many of Tversky and Kahneman's examples indicates that this type of failure in human reasoning may not occur very often. If situations of this type are relatively uncommon, then the definition of rationality as utility maximisation remains a useful simplification, even if the assumption does not accurately describe all human motivation.

Another way of making this point is as follows:

> ...I submit that those heuristics are all perfectly good decisional shortcuts, rules of thumb that point us in the right direction in the vast majority of cases. What the experimentalists have done is simply to show that these shortcuts, like all shortcuts, can occasionally cause us to err (Goodin 1999, 69).

On a related point, there is some experimental evidence showing that individuals in these experiments correct their statements once errors of the type discussed above have been pointed out. As such, these results might reflect failures in calculation, rather than in the thin rationality assumption (Morton 1999, 151).

The second line of response asks whether these challenges yield significantly different models of decision making (Riker and Ordeshook 1973, 21-23). For instance, while Simon claims that his models yield distinctly different predictions about human behaviour (e.g. that individuals will typically be quicker to end the search process than utility maximisers), it is not clear that bounded rationality is so unlike utility maximisation. The differences between the models disappear, for instance, if we adopt the secondary assumption that decision making is characterised by uncertainty. If this is the case, then utility maximisers will continue searching until the costs of finding out if alternatives are better than the current options becomes too high. As Gaus says "...if the set of remaining options does not clearly include a better alternative, it would also seem that a rational optimizer is apt to abandon the search [at this point]" (1994, 179).

The third response to these criticisms asks whether or not some of these alternative versions of rationality might be included within the optimising model. The rationale for this response is the observation that bounded rationality appears to reflect some of the same ideas as those contained in Downs' rational ignorance postulate. Even apart from work on rational ignorance, there is some rational choice theory that explicitly attempts to deal with bounded rationality. For example, many of the chapters in Ferejohn and Kuklinski (eds. 1990) begin with the assumption that individuals are limited in their decision-making abilities.

Different theorists then attempt to model the implications that follow from this assumption within a standard rational choice framework. Echoing this point, Goodin says that much of Simon's work on bounded rationality might usefully complement the utility maximisation model (1997, 2). The same might be said of the literature on cognitive dissonance, adaptive preference formation and weakness of will (Abel 1992, 192). Together, rational choice theory and the psychological literature might develop a more realistic, but tractable, account of human motivations and behaviour.

2.7 Self-interest

This section examines some of the assumptions that underpin rational choice accounts based on 'thick' rationality. While these assumptions take different forms, the most common versions of thick rationality involve some element of self-interest. For example, thick accounts of rationality often postulate that individuals seek to maximise votes, power and/or wealth. Rational choice accounts that make use of thick rationality are so common, particularly in the Virginian and Chicago Schools, that some theorists list self-interest as a defining characteristic of rational choice theory (Mueller 1997, 10).

Usage of the thick rationality postulate is justified in a number of different ways. For example, Tullock claims that the rational choice account of self-interest is descriptively accurate (Rowley and Tullock 1988, 5). Elster, on the other hand, argues that the self-interest assumption, like utility maximisation, has a methodologically privileged status because self-interest can exist without altruism, but altruism cannot exist without self-interest. Elster's logic is as follows: in a world in which everyone is entirely altruistic, it would be self-defeating for any particular individual to be altruistic. That is, everyone would want to give gifts, but no one would want to receive them. In Elster's words "[n]on-selfish behaviour is logically parasitic on selfishness, since there can be no pleasures of giving if there are no selfish pleasures of having" (1985, 9).

Milton Friedman justifies the use of the self-interest assumption on rather different grounds. Unlike Tullock he argues that the assumption will typically be descriptively inaccurate. According to Friedman's instrumentalism, however, the assumption should be retained as long as it provides good testable hypotheses (1966). Still others, like Brennan and Buchanan (1987) use the self-interest assumption, again in the knowledge that it is descriptively incorrect, because they believe institutions should be designed to function well even when citizens behave in persistently self-interested ways.[8]

The most compelling reason for the use of the self-interest assumption is simply that, in some circumstances, self-interest is a useful simplification. As such, it is not necessary to commit to the belief that individuals are self-interested, just that it is sometimes useful to model human interactions 'as if' they are self-interested. Implicit in this justification is the argument that self-interest is not central to rational choice theory in the way described by Mueller and some critics (e.g. Lewin 1991, 3-4). In order to show that this is the case, table 2.1 categorises some of the most important rational choice findings according to the nature of their assumptions about human motivation.

[8] The status of self-interest is also complicated by the tendency among practitioners to adopt both broad and narrow definitions of the word. At times, self-interest is extended to cover all behaviour that increases individual utility. At its full extent, this definition covers all forms of material and non-material gain, including psychic benefits from action. In adopting this definition, rational choice theorists can explain all rational human behaviour as being motivated by self-interest. This expansion of meaning, however, amounts to little more than a sleight of hand. If self-interest is defined so broadly that it covers all human behaviour, then the concept is no longer useful in generating concrete predictions or explanations.

Table 2.1: Rational Choice Results Categorised by Motivational Assumption

Findings that don't rely on assumptions about human motivations	**Findings that rely on power or wealth maximising assumptions**	**Findings that include power maximisation in the utility function**
Black Committee decisions and cycling *Arrow* Impossibility Theorem *Buchanan and Tullock* Problems with majority rule *McKelvey* Agenda manipulator findings	*Stigler and Peltzman* Regulation *Riker* Minimum winning coalitions *Niskanen* Bureaucracies *Downs* Median voter theorem	*Downs* Rational abstention and rational ignorance *Olson* Interest group activity

The first column of table 2.1 lists findings that have no reliance on assumptions about human motivations, other than the thin rationality assumptions outlined in the previous section. All of these works describe basic procedures in democracies, especially those seen under majority rule. So, for instance, Arrow proved that there is no plausible way to map the wishes of individuals into a common welfare function that abides certain minimal rules, without resorting to dictatorship or incoherent social preferences. None of the assumptions underpinning this result relate to the content of individual preferences.

The middle column lists findings that unquestionably rely on power or wealth maximisation assumptions. For instance, as is clear from chapter 1, accounts by Stigler and Peltzman relating to regulation combine both of these assumptions. In

their accounts, interest groups compete with each other so as to increase their private gains, while regulators, who are elected officials in Stigler and Peltzman's models, seek to maximise potential votes (Peltzman 1976, 214). Niskanen's (1971) account of the interaction between bureaucrats and parliamentarians similarly relies on both the power and wealth maximising assumptions.

Down's median voter theorem makes a slightly different use of the power maximisation assumption. While Downs states that the theorem relies on the assumption that parties aim to win elections, it is clear that the desire to win need not be motivated entirely by aggrandisement and power. Instead, it is reasonable to suggest that parties or candidates who truly believe in the import of their policies will also seek election in order to implement these plans. Offsetting this fairly broad motivational claim is the force of Downs' central prediction, i.e. that parties will tend to co-locate at the median of the policy distribution. For the co-location argument to hold, extremist parties must be willing to abandon their policy positions (and principles) in the search for votes. So, while the assumption that parties seek election need not be motivated by narrow concerns, the prediction that parties co-locate at the median is definitely underpinned by the assumption that parties use policy platforms only as a means to gain power.

The third column in table 2.1 lists those rational choice findings that hold when individuals are motivated by a range of concerns, one of which is power maximisation. Downs' rational abstention postulate falls into this category. While it is clear that Downs' predictions of rational abstention and ignorance will not eventuate if we assume voters are motivated by the belief that voting is a desirable act in its own right, the result does hold in situations where voters are assumed to have mixed motives. For instance, it is perfectly consistent to argue that voters motivated by a mix of egoistic and non-egoistic motives will rationally abstain or remain ignorant when it is unlikely that their vote will have any impact on the outcome.

This list also makes clear that accounts of rent seeking behaviour and logrolling in legislatures need not rely on the thick version of rationality posited by members of the Chicago and Virginia Schools. Instead, these results hold under a range of

motivational assumptions. That is, the literature shows that rent seeking and logrolling will serve the ends of both wealth maximisers and more public-spirited individuals.

Olson's account of interest group activity falls into the same category. Like the others in this group, his analysis "...does *not* necessarily assume the selfish, profit-maximizing behaviour that economists usually find in the marketplace" (Olson [1965] 1998, 64; italics in original). The logic that Olson relies on is the same as that used by Downs. As long as behaviour is assumed to be rational, in the sense that individuals act in ways that best serve their aims, the motivational source of behaviour is irrelevant. Entirely altruistic, rational actors may also choose not to engage in collective action when they realise that the benefits of their action will be minuscule (1965, 64-65). As with Downs' theory of voting behaviour, however, Olson's predictions will not hold if we assume that actors participate in collective action solely because they believe that participation is a good in itself.

Overall, these examples show that rational choice theory makes use of a range of different rationality assumptions, varying from the thin version that underpins Arrow's impossibility theorem to the thick accounts used by Stigler and Peltzman. A wide range of findings, including the median voter and collective action results, fall between these extremes. The charge that rational choice theorists assume selfish behaviour misses what is going on in rational choice accounts of politics. Power maximisation and wealth maximisation certainly play a role in many explanations, but neither is a necessary characteristic of rational choice theory.

2.8 Conclusion

As in the previous chapter, one of the strongest themes in this chapter relates to the diversity of rational choice approaches. At the level of assumptions, it is clear from this chapter that different rational choice theorists make varying use of self-interest and rationality assumptions in their work. This diversity is also reflected in the views of rational choice theorists on both the best response to Green and Shapiro's criticisms and the way forward for rational choice theory.

In my judgement, the best responses to Green and Shapiro are threefold. First, Green and Shapiro underestimate the value of rational choice theory as the source of pure theory that generates new and interesting research programs in its current form. Second, Green and Shapiro mistakenly conclude from the failure of particular models that the approach as a whole is empirically unsupported. Third, Green and Shapiro misconstrue post-hoc theorising as an enterprise that aims to save theory, rather than improve theory. This third argument is most convincing when viewed in conjunction with an account of the varying claims to universality made by rational choice theorists. If, as shown here, rational choice theorists are not committed to universalism, then practitioners are more likely to engage in activities described by Green and Shapiro as post-hoc theorising so as to provide improved explanations, rather than to 'save' any claims to universality. Importantly, this commitment to less than universal theorising also supports the view, advanced elsewhere in this thesis, that rational choice theory complements, rather than replaces existing accounts of politics.

These attempts to establish through theoretical and empirical observation the limitations of rational choice theory might be viewed by critics as part of a major back down by practitioners. Some rational choice practitioners may similarly feel that the new direction of the field jettisons one of the theory's most attractive features. In one sense, both critics and sympathisers are right that, without claims to universality, rational choice is less striking than its earlier manifestations. At

the same time, contemporary rational choice theory should not suffer simply because it has adopted more realistic aspirations.

A better assessment of the prospects facing the discipline is gained if we consider the potential difficulties and rewards associated with moves towards a version of segmented universalism. While there is currently no agreement on the best way to proceed, it is clear that the approaches discussed here hold significant promise. That is, rational choice research that combines theorising and close empirical study is best placed to respond to the charge that rational choice theory has produced little of empirical merit. Such research is also most likely to establish when and where rational choice approaches will prove most profitable.

3 SPATIAL POLITICS AND THE 1998 QUEENSLAND STATE ELECTION[ϕ]

3.1 Introduction

The rise of Pauline Hanson's One Nation (hereafter referred to as One Nation) in the 1998 Queensland state election has been the focus of considerable academic and popular discussion. Explanations for One Nation's electoral success vary. Some writers emphasise the party's populist streak (Stokes 2000, Wells 1997), others point to the sense of economic dissatisfaction felt by One Nation voters (McAllister and Bean 1999) and yet others emphasise the racist element in One Nation policies (Gibson et al 2000, Jackman 1998, Money 1999). Against these rival claims, Pauline Hanson has consistently held that the party simply represents the views of many ordinary Australians, hitherto ignored by the mainstream political parties and by elitist politics more generally (*Pauline Hanson's First Speech in the House of Representatives* 1997). This chapter adds to that debate, but does so in a substantially different way.

The basic objective in this chapter is to impose the logic of the spatial voting model on the core set of facts before and after the 1998 Queensland election in order to see what, if anything, can be concluded about One Nation's entry into Queensland politics.

ϕ An earlier version of this chapter appears in Brennan and Mitchell (1999). While the central argument in this chapter is unchanged, this longer chapter adds, and engages with, an enlarged discussion of literature in the field.

In particular, the chapter asks and answers two questions. These are:

1. Can the change in seats witnessed at the Queensland state election be accounted for in a single-dimensional model?

2. Is Hanson right to say that there was no change in voter preferences, specifically no increase in racism, and that she simply represents the views of previously alienated Queenslanders?

The structure of this chapter is as follows. Section 3.2 briefly outlines the existing work on this topic. In doing so, the section points out some of the differences between the spatial approach to voting and more standard approaches in political science. More time is spent on the details and a defence of the logic of spatial modelling in section 3.3. Thereafter, the chapter switches to an analysis of the changing make-up of the Queensland Parliament. Section 3.4 sets the scene by first outlining the facts relating to the election. There are three different swings in seats that need to be accounted for. These are: a shift in seats from the Liberal Party to the ALP; an equal sized shift from the ALP to One Nation and a shift from the Nationals to One Nation. With the facts laid out, section 3.5 attempts to represent the change in seats that occurred at the election over a single-issue dimension. This attempt fails. An account of changing seats within a two-dimensional model, developed next, has more success. The chapter concludes, in section 3.6, by summarising the contributions that rational choice theory can make to the study of the 1998 Queensland state election.

3.2 Background

In addition to the explanations already mentioned, academics have responded to One Nation's success in at least four different ways. The earliest of these accounts provided either an explicit response to One Nation policies (e.g. Bohill 1997; Fraser 1998) or an attempt to understand the movement as an attack on elites and globalisation more generally (e.g. Brunton 1998; Lynch and Reavell 1997; Moore 1997). More recent work has made use of opinion polls and surveys so as to focus on the attitudes and socio-economic characteristics of One Nation supporters (e.g. Bean 2000, Bean and McAllister 2000, Goot and Watson 2001).

While there is some dispute over the importance of different characteristics, there is general agreement that voting for One Nation is highly correlated with geography (Goot and Watson 2001, 160). In short, analysis shows that voters outside metropolitan areas are more likely than city dwellers to vote for One Nation (Bean and McAllister 2000, 178; Grant and Sorensen 2000, 206). Support for One Nation is also more weakly correlated with gender (men are more likely than women to support One Nation) and age (voters in the 45 to 64 age group are more likely to favour One Nation than voters in other age groups (Bean and McAllister 2000, 177; Charnock 1999, 95; Goot and Watson 2001, 163). Other recent work examines factors such as the media's role in One Nation's success. For instance, Goot (2000b) isolates and examines three different ways that the media might have impacted on One Nation's rapid rise. These are the suggestions that publicity of any sort boosted Hanson's support; that Hanson's backing increased with attacks from the quality press and that 'radio shock jocks' significantly increased Hanson's support.

Lastly, Jackman (1998), Money (1999) and Gibson et al (2000) examine the importance of race as a factor in One Nation's rise. All suggest that while issues relating to race have long-running importance in Australia, they have until recently lacked sustained political expression. The reason for this, Money (1999, 11) and Jackman (1998, 169) argue, is that the increased salience of the 'race dimension' threatens to splinter existing support for the major parties. As Money says: "...parties of the left and the right choose to define the political debate on the economic dimension as opposed to the xenophobic dimension, in order to avoid punishment by the immigrant voters" (1999, 11).

Jackman's empirical analysis of survey data on candidate and voter views on questions relating to race supports this argument. He suggests that while the average positions of voters on standard left-right issues, like trade unions and wealth redistribution, lie between the average ALP and Liberal/National Coalition candidate positions, average voter views on Aborigines and migrants are to the 'right' of both parties (Jackman 1998, 170-172).

Jackman also admits that:

> ...in the absence of comparable data over time, it is difficult to judge the extent to which my results reflect a racially supercharged political context at the time of the 1996 federal election (when the survey data were collected), or a longstanding but understudied component of Australian political ideology. (Jackman 1998, 173)

This is where spatial theories of elections can contribute to the study of the Queensland election result. In developing a spatial model of the election, it is possible to bring a new perspective to the question of whether One Nation's rise results from a change in voter preferences, specifically an increase in racism, or whether views were unchanged between the 1995 and 1998 Queensland elections.

3.3 The Logic of Spatial Models

As discussed in chapter 1, spatial models of elections are underpinned by a large set of assumptions. Some of these are reasonable shortcuts for reality, others are maintained because they make the geometry or arithmetic of spatial models tractable. This section briefly re-describes six assumptions that are common across spatial models and then details two assumptions that are characteristic of this chapter, but not of spatial approaches more generally.

First, the most basic assumption in spatial models is that it is possible to think about politics in spatial terms. What is important in these models, however, is not the absolute degree of 'leftness' or 'rightness' of particular parties, but the relative positions of parties along such a scale. Second, these models assume that perceptions of party policies are more or less common across voters. This means, for example, that there is general consensus on what the ALP's policies are and how the Labor Party's platform differs from the Liberal Party's or the National Party's.[1] This assumption may be more than usually strained in the case of One

[1] In spatial analysis, voter perceptions about policies are more important than actual policies.

Nation. For one thing, One Nation policies were (and remain) notoriously vague.[2] And for another, like all new parties, their policies were yet to be implemented.

In the end, the question of whether or not there are commonly understood issue dimensions can only be solved through empirical work. Unfortunately there is no data relating to the 1998 Queensland election that will answer this question. Given the paucity of data on the topic, it does not seem unreasonable to go with intuition and assume, because voters must form some perception of party positions and because the evidence on which to base those perceptions is available equally to all, that voters develop roughly similar perceptions.

Implicit in the text above is the third assumption - that policies matter to voters and that, to a large degree, voters cast their ballots on the basis of policy concerns. At first glance, this assumption appears to be hopelessly ill-conceived. Opinion polling prior to the election typically showed that fewer than 50% of voters who planned to vote for One Nation named its policies as the primary reason for their choice. This finding should not be taken to imply, however, that voter perceptions of One Nation policies played a minor role in the election. Instead, the fact that 25% said things like 'she says what most people really think' and 'Pauline speaks the truth' (Morgan Poll 1998) suggests that diffuse satisfaction over One Nation policies may have played a significant role in One Nation's rise. These comments are in line with Downs' (1957) suggestion that, because the costs of gathering information typically outweigh the likely benefits, voters will often remain 'rationally ignorant' of policy detail.

The fourth and fifth general assumptions of spatial models relate more directly to the content of voter preferences. Following the weak rationality postulates, spatial models typically assume both that people have preferences over the different options on offer and that they know what their preferences are. Together, these assumptions ensure that it is possible to draw diagrams that represent both the main issues in contest and the preferred positions of actors over those issues. The sixth widely used assumption found in this chapter relates to the way that voters

[2] Perceptions of the haphazard state of One Nation policies are reinforced by an account from Reynolds (1999) of their legislative activity in the first session of parliament after the election.

choose between options. The chapter assumes that voters favour bundles that are closer to their ideal choice over those that are further away. In other words, individuals have single-peaked preferences.

All of the assumptions listed so far are general characteristics of spatial theories of voting. The next two, more controversial, assumptions are particular to the current enquiry. The first of these assumes that voter ideal positions remained unchanged over the entire electoral sequence. This means that in the period between the 1995 and 1998 state elections, no voter changed his/her view of the best policy outcome. This assumption is clearly false. Voter preferences do change, and sometimes very quickly. The volatility of One Nation's support – the party received 22% of first preferences in the June state election, compared to 14.5% of first preferences from Queenslanders at the October Federal election - suggests that voter preferences changed dramatically in the space of three and a half months (Reynolds 2000, 158). Despite these figures, however, it is important to remain somewhat wary of the conclusion that changes in policy preference were the sole cause of One Nation's dramatic loss in support at the 1998 federal election. It is perhaps more likely that disillusionment over One Nation's poor performance both in the Queensland Parliament and within the party generally were more significant factors in One Nation's declining support in the period between the state and federal elections (Reynolds 2000, 167). As such, these facts alone do not show that the assumption is unsustainable.

The greater rationale for maintaining the assumption that preferences are constant over this period is not, however, fit with reality. Instead, the assumption is maintained because the chapter attempts to isolate the impact of One Nation's entry on the Queensland electoral scene. By holding other factors, including preferences, constant it is possible to examine this factor *in isolation*. It is for this reason that the assumption is maintained throughout this chapter despite evidence and intuition to the contrary. Accordingly, if the chapter's conclusions prove unenlightening or wrong-headed, then we can conclude that One Nation's entry into Queensland politics as a party with distinctly different policy concerns is

relatively unimportant in its success and that other factors deserve greater explanatory emphasis.

The second controversial aspect of this chapter is its focus on seats, not individual votes. This focus is driven by the availability of data. While there are, clearly, a range of different data sources on this topic, each has deficiencies that rule it out of this study. For instance, although a series of opinion polls were conducted at the time of that election, this data is insufficiently detailed to serve as the basis of the model developed here. Similarly, while data from the 1998 Australian Election Survey asks questions about voter views and self-placement on a left-right scale, it neither requests information on the self-placement of voters on any substantive issues, nor elicits views on the policy positions of parties. In addition, because this survey focuses on the issues involved in the 1998 October federal election, it is less useful in explaining the Queensland state election. As such, while the focus on changing seats is far from ideal, as discussed below, it has the advantage that at least we know that these facts represent changes in Queensland electoral politics.

Even if it is possible to put these complications aside, there is at least one other complaint directed against the analysis of voting trends at the level of seats, rather than individual votes. Goot and Watson (2001) argue that, in inferring changes in individual voting behaviour from aggregate statistics, this analysis "...runs foul of the ecological fallacy" (181), where the ecological fallacy occurs when analysis of aggregate level statistics leads to misleading conclusions about individual level behaviour.

As Goot (1988) says:

> ...calculations based on seats are much less illuminating than calculations based on votes. This is because votes are what cause seats to shift and while some seats need only a nudge others need a catastrophe. To know a party's (net) gains or losses in terms of seats is to know something but not enough; and a little knowledge can be a dangerous thing. (Goot 1988, 94)

There are two different points in this quotation that should be explored. One point amounts to the warning that 'a little knowledge can be a dangerous thing'. Given earlier admissions about the paucity of statistics on this topic, it is difficult to deny that this might be a problem for the analysis in this chapter. The only way to determine whether or not the warning applies here, however, is to determine where a little knowledge takes us. As reasoned previously, if the implications developed at the end of the chapter are either unenlightening or wrong, then this criticism will be warranted. Otherwise, the potential pitfalls associated with a little knowledge might be outweighed by realised benefits.

Goot's other argument relates to the issue of ecological fallacies – i.e. that aggregate statistics might be used to reach misleading conclusions about individual behaviour. As an example of the problem, Goot (1988) re-examines an account of the success of NSW Labor in the 1930s and 1940s and shows that a focus on seats, rather than votes, can lead to mistaken conclusions. He argues that the received account of the success of the McKell Labor government in country NSW at the 1941 state election is based on the observation that the ALP won an additional 10 core rural seats at the 1941 election, compared to the 1938 election. Alone, this fact supports the view that Labor won on the basis of success in the country. Examination of votes, however, tells a different story. Such scrutiny shows that the ALP gained substantially fewer first preference votes in country NSW (37.4%) than in either Sydney (50.4%) or near-metropolitan NSW (70.6%) in the 1941 election (Goot 1988, 92-96). Other measures of votes, including some that exclude uncontested seats, show similar levels of support for Labor across the state. Given these figures, Goot argues that it is difficult to sustain the received view that the ALP won *because* of its outstanding success in country NSW. Instead, Goot contends that the discrepancy between country seats and country votes is accounted for by the number of second and third preferences that flowed to Labor in country NSW. Goot argues that this high proportion of second and third preferences hardly represents the overwhelming endorsement described in the received account of ALP success (1988, 100). The larger lesson from Goot's

study is that changes in votes, rather than seats, may lead to different and more defensible conclusions about politics.

Goot and Watson are right in their warnings about the ecological fallacy and their calls to focus on votes, not seats. It is a mistake to infer changes in individual preferences from aggregate level data. The criticism, as directed against this work, however, is misplaced. This is because this chapter makes no attempt to reach conclusions about changing voter preferences. Indeed, the logical experiment conducted here starts with the assumption that voter preferences *do not change* over the two elections. Instead, the chapter uses changes in seats to speculate on the policy positions of parties and, more specifically, on One Nation's policy position.

Before moving to this analysis, it is worth emphasising that this chapter makes no assumption, implicit or otherwise, about why voters happen to have the ideal policy positions that they do. In particular, there is no presumption that citizens vote in a self-interested fashion. The preferences of voters might be based no less on what they believe to be best for the state or for Australia as a whole than on what they think will increase their well-being as individuals or the well-being of their class or group. It is important to make this point because, as mentioned previously, many critics (e.g. Lewin 1991, 3-4; Lewin 1998, 1-3; Zey 1992, 14) are apt to think that a form of economic egoism is implied. While some voting models in the spatial tradition do need to make some assumptions about the motivations of voters and economic egoism, no such assumption is necessary for the analysis presented in this chapter.

3.4 The Facts

The central facts of the Queensland election are as follows. Prior to the 1998 election the Liberals held 15 seats, the Nationals held 29 seats, and the Australian Labor Party (ALP) held 44 seats. Just short of a majority, the National/Liberal coalition gained the support of Independent Liz Cunningham during its 1995 - 1998 government. After the 1998 election, the Liberals held 9 seats, the Nationals

held 23, the ALP held 44 and One Nation held 11 seats. There were also two independents (Liz Cunningham and Peter Wellington, the latter of whom agreed to support the Beattie Labor government). Of the 11 seats that One Nation gained, it won 5 from the Nationals and 6 from the ALP. One Nation won no seats from the Liberals.

The ALP, however, won 6 seats from the Liberals, leaving the total number of Labor seats unchanged (Australian Broadcasting Corporation 1998, Electoral Commission of Queensland 1998). The objective of the analysis is to explain a series of simple facts about these changing seats. These facts are:

- One Nation won seats from the Nationals and ALP.
- The ALP won seats from the Nationals.
- No seats changed hands between the Liberals and the Nationals or between the Nationals and Labor.

Table 3.1 shows the pattern of gains and losses between the parties. In this table, rows show the gains made by the various parties contesting the 1998 election and columns show the party location of the corresponding losses. Reading across the first row, for example, the Liberals lost 6 seats to the ALP (column 3) and no seats to any other party. The final row shows that One Nation won 5 seats from the Nationals (column 2) and 6 seats from Labor (column 3).

Table 3.1: Gains and Losses to the Major Parties in the 1998 Election

Gains from/ Gains to	Liberals	Nationals	ALP
Liberals	-	**0**	**-6**
Nationals	**0**	-	**0**
ALP	**6**	**0**	-
One Nation	**0**	**5**	**6**

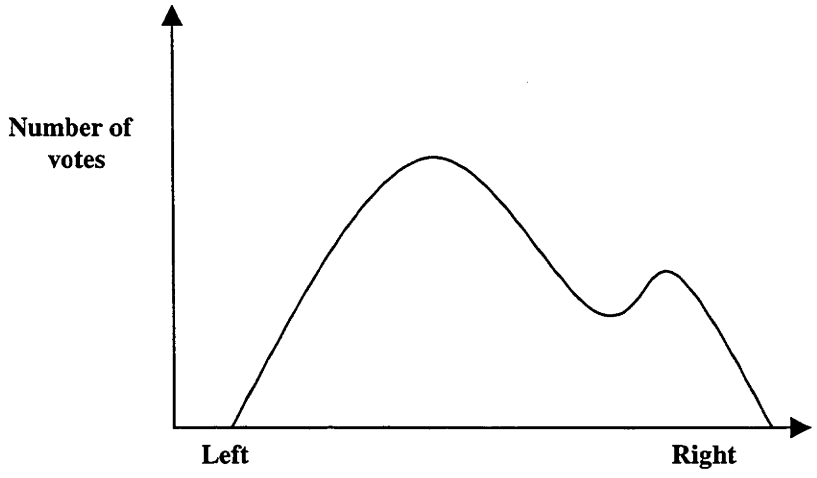
3.5 The Analysis

As is clear from chapter 1, spatial models of elections, and rational choice theory more generally, prize simplicity. The object of such models is to see just how much is illuminated by the simplest possible construction. Accordingly, this chapter attempts to render the 'issue space' in play in the Queensland election in terms of as few dimensions as possible. In fact, one could list, in addition to common concerns relating to health, education and government stability, at least six issues at stake in the election. These include: funding for indigenous Australians; Native Title; economic protection; arts funding; immigration levels; and gun control. To reduce this list to one or two salient dimensions necessarily diminishes the realism of the model, and can leave the modeller open to charges of manipulation. This criticism is justified, but the following analysis puts the concern to one side, again so as to see just how far the simple version can take us. Complexity can, and will, be added if the simpler version fails to capture something that seems to be critical.

The One-Dimensional Model

Suppose that political positions in the 1998 Queensland election could be collapsed to a single dimension. That is, suppose there exists some simple left-right spectrum that, for all intents and purposes, captures the essence of political division within the Queensland context. If this is the case, then it is possible to think of the ideal points of voters as being laid out along this single spectrum in something like the continuum depicted in figure 3.1.

Figure 3.1: Number of Votes Graphed Against the Left-Right Policy Dimension

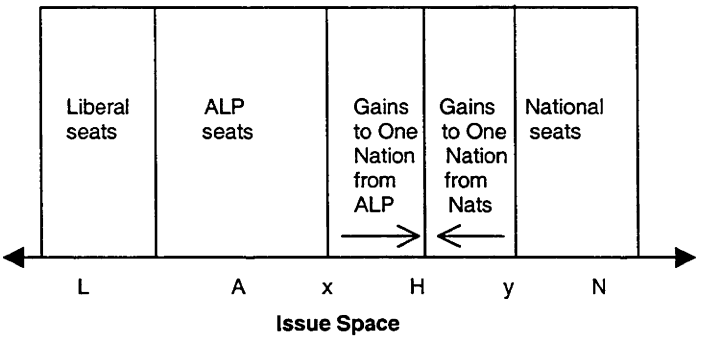


Given this preference distribution, parties are characterised by the location of their policy along the continuum. As set out earlier, voters are assumed to allocate their votes to the party that lies closest to their ideal in each case. On this basis, several conclusions are immediately apparent from an examination of the change in seats that occurred at the 1998 election. Spatial modeling tells us that since One Nation won seats from both Labor and the Nationals it must be the case that:

1. Labor and the Nationals were located next to one another along the spectrum prior to the entry of the new party; and
2. One Nation took up a location somewhere between Labor and the Nationals.

In order to fulfill both of these conditions, the parties at the election must have been arrayed along a single dimension in something like figure 3.2.

Figure 3.2: A Uni-Dimensional Representation of Queensland Politics

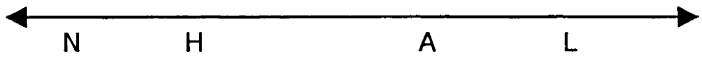


Here (and subsequently) A, H, N and L are used to depict the locations in issue/policy space of the ALP, One Nation, the Nationals and the Liberals respectively. If One Nation entered the electoral space between A and N, then all seats in which the median voter prefers a policy that falls between H and x (where x is the midpoint of the line segment AH) will shift from the ALP to One Nation. In other words, all voters with preferences in this region will find themselves closer to the new entrant than to the ALP and will vote accordingly. Equally, all seats in which the median voter lies on the segment Hy (where y is the midpoint of HN) will switch from Nationals to One Nation, as voters find themselves closer to One Nation's policy than to National policy.

Remember, also, that seats in the 1998 election shifted from the Liberals to Labor. In spatial models, this implies that the Liberal Party must be located next to the Labor Party along the spectrum, on the side further away from One Nation and hence further still from the Nationals. This is the only way that the change in seats that occurred can be represented in a single dimension. Furthermore, if seats changed hands between Labor and Liberals at 1998, then either the Liberal Party must have moved further away from Labor, or the ALP must have moved closer to the Liberal Party position (denoted throughout by L). Although either of these moves is sufficient to create a set of voters whose ideal points after the change is closer to A than to L, only one such move is necessary to create a set of such voters.

On this basis, in addition to the requirement that One Nation locates between the Nationals and the ALP, the shift in seats that occurred at the 1998 election only makes sense if the Liberals lie on the Labor side of One Nation. This means that the Liberals are furthest, in policy terms, from the Nationals. The arrangement depicted in figure 3.2 (or its reversal, depicted in figure 3.3) is the only one consistent with the actual passage of seats and the assumption of a single dimension.

Figure 3.3: An alternative uni-dimensional representation



What must remain inviolate in these diagrams is the relative positions in the overall spectrum - either Liberal, Labor, One Nation, National; or National, One Nation, Labor, Liberal. Two implications follow from the arrangement described above. First, in spite of their longstanding coalition, it must be the case that the Liberals and the Nationals lie at opposite ends of any single-issue spectrum. Second, a further necessary implication of this representation is that One Nation is not, and cannot be, an extremist party, precisely against the perceptions of almost all commentators, including those few who are sympathetic to One Nation's political ambitions (Johnston 16/6/1998; Nicholson 15/6/1998; Robbins 13-14/6/1998).

If these implications are thought to be implausible, then we are faced with one of two alternative conclusions. One possibility would be to reject the hypothesis that voting behaviour is significantly influenced by party policy positions/general ideology, and endeavour to find some attribute of electorate characteristics that locates the parties in the way indicated in figures 3.2 or 3.3. For example, party support might be determined by population density. A number of studies make just this observation (e.g. Grant and Sorenson 2000, Mackerras 1998). For example, Mackerras (1998) points out the ALP won 40 of its 44 seats and the Liberals 8 of their 9 seats in electorates with relatively high population density, i.e. seats smaller than 400 square kilometres. In contrast, the Nationals won 6 of

its 9 seats in electorates of size greater than 27,000 square kilometres. Lastly, One Nation won only medium-sized seats, that is, seats between 400 and 27,000 square kilometres. Clearly, the important question must be why a particular characteristic, like population density, should determine voting behaviour.

Rather than attempt to find some variable that represents parties in this way, this chapter suggests that it is best to investigate the second conclusion, i.e. that the relevant policy space in the 1998 Queensland election may not be uni-dimensional at all. In other words, we might reject the idea that there is some single salient dimension that captures voter perceptions and insist that to reflect the spatial pattern of Queensland voters' views, it is necessary to move to the two-dimensional case (at least). This view is partly confirmed by results in the 1998 Australian Election Survey showing "considerable disagreement in the minds of the public about where the party [One Nation] sits [on the left-right spectrum]" (Bean 2000, 144). While it is difficult to know the source of this disagreement, the diversity in respondent answers, combined with the logic developed above, provide ample reason to be suspicious of accounts of the election that emphasise a single dimension.

If we do reject the single dimensional account, then a further necessary implication is that there was more to the success of One Nation than the 'race' issue. Commentators who seek to explain the success of One Nation by appeal to that issue alone are compelled to accept the twin implications of the uni-dimensional model. These are, first, that One Nation was not perceived by voters to be the most racist party in the election; and second, that the Nationals and the Liberals were seen as lying at opposite ends of the racism spectrum. As is apparent below, these rather implausible conclusions disappear once we move to the two-dimensional model of the election. In that scenario, it is possible to represent the Liberal and National parties as being 'close' to each other in policy terms and One Nation as being 'extreme' in some plausible sense that is entirely consistent with the election results.

The Two-Dimensional model

This section develops a two-dimensional model of party policies at the 1998 Queensland election. The section retains the assumptions that each citizen votes for the party that offers the policy position closest to her ideal point and that voters' preferences over policy are invariant over the election period. In addition, however, the section develops a model in which, although the Liberals and the Nationals are seen to be different, they occupy 'close' positions in the policy spectrum.

In developing the two-dimensional case, I have also adopted a particular specification of the policy dimensions in play. This is essentially for expository reasons and could be changed. The particular policy dimensions adopted here maps racial tolerance (including attitudes to immigration and indigenous Australians); and 'market interventionism'. The latter includes government intervention in social and economic arenas. Again, these issues have been chosen because they stand out in opinion polls and the 1998 Australian Election Survey data as being of particular salience to One Nation voters (Bean 2000, 148-149, Goot and Watson 2001, 167).

The task of locating parties within such a framework is always difficult because voter perceptions about policies, not the perceptions of commentators, are important. The task is more difficult here for two reasons. In the first place, the task of locating One Nation policy is, as mentioned before, difficult. Second, the positions of all parties on the question of interventionism are in some state of flux. Labor's traditionally strong economic interventionist stance has weakened substantially over the last decade or so. In addition, while both One Nation and the Nationals espouse the provision of support to rural interests, the extent of such intervention remains unclear. Against this background, this section makes the judgement that the populist style of One Nation is consistent with a fair degree of special interest intervention, including some intervention on social grounds, although less of the latter than would traditionally have been supported by the

Labor Party. The section also assumes that the Nationals, though more interventionist than the Liberals, are less interventionist than the ALP.[3] Consider on this basis a representation of the situation prior to One Nation's entry as drawn in figure 3.4.

Figure 3.4: Party Positions Prior to One Nation's Entry

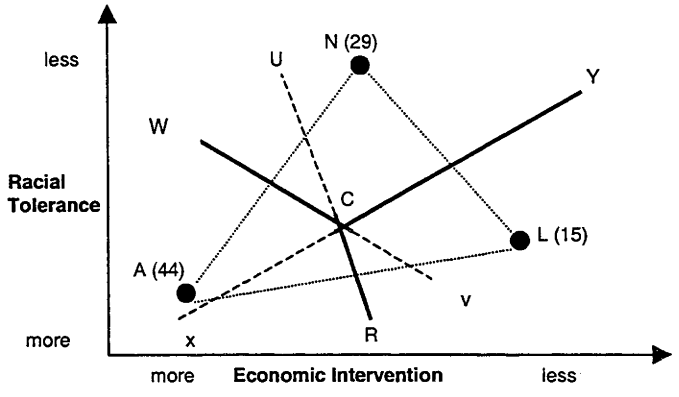


Figure 3.4 represents degrees of economic interventionism along the horizontal axis, where intervention decreases as one moves to the right. Degrees of racial tolerance are mapped on shown on the vertical axis, where the level of tolerance decreases as one moves upwards. As mentioned previously, it is not necessary to be concerned with the precise metrics of 'intervention' and 'tolerance' or with the exact locations of parties in the space. Instead, as is clear below, provided a certain sort of "circular" ranking is preserved, the results are quite robust. However, on the basis of predominant judgements of commentators, this model ranks the ALP (A) as most 'tolerant' followed by Liberals (L), the Nationals (N) (Morgan Poll 1998a; Taylor 15 June 1998). (Later, the model adds One Nation (H) as being the party that is least tolerant on race issues.) There is also some support for this ranking from Goot and Watson (2001, 173). Using opinion poll data, they show that views on indigenous Australians and immigration distinguish One Nation voters from ALP voters, but not from Coalition supporters. Jackman (1998, 171) makes similar claims on the basis of the 1996 Election Survey. On the economic intervention dimension, the model ranks the Liberals as least

[3] These rankings are not critical to the analysis. Later sections show that the rankings of the parties can be altered without altering the conclusions of the analysis.

interventionist, followed by the Nationals, and then One Nation and Labor (Nicholson 15 June 1998).

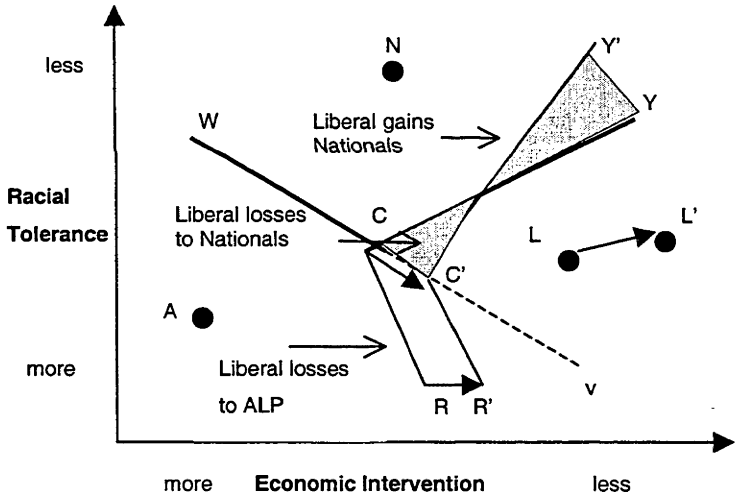
It is important to emphasise that not all elements of these rankings are strictly necessary. One Nation could be perceived to be more interventionist than Labor, and less racially intolerant than the Nationals without changing the basic conclusions of this analysis. Equally, the Liberal Party could be ranked as more tolerant than the Labor Party. Despite these possible alternatives, these initial rankings are a plausible point of departure.

Consider further the configuration of party positions in figure 3.4 before the entry of One Nation. The assumption that voters support the party with the closest policy package is generalized to two dimensions in the following way. Consider the locus of points that are equidistant from L and N. These points form a straight line, denoted XY in figure 3.4, that bisects and is orthogonal to the line LN. Any voter whose ideal point lies below XY will find his/her ideal policy closer to the Liberal Party than the National Party and will thus vote Liberal. Equally, any voter whose ideal point lies above XY will vote for the Nationals in preference to the Liberals. The corresponding rightangle bisector of AN (line WV) depicts the divide between those who prefer the Nationals to the Labor Party. Any voter whose ideal point lies to the left of WV will vote Labor rather than National and vice versa for voters with ideal points to the right of WV. The rightangle bisector of AL is denoted UR and represents the corresponding Liberal/Labor divide. The lines WV, UR and XY intersect in a common point (the circumcentre of the triangle ANL) which is denoted by 'C'. As such, it follows that any voter whose ideal point lies in the area subtended by the arcs RCY will vote Liberal, any voter whose ideal point lies in the area RCW will vote Labor and any voter whose ideal point lies in the area WCY will vote National. Since the distribution of seats prior to the 1998 election is known, these numbers can be inserted into figure 3.4 to reveal the number of electorates whose median voter lies in the relevant area.

Now, holding this underlying constellation of voter preferences unchanged, turn to the 1998 election. There are two new considerations to take into account: the

introduction of a new party that won seats from both Labor and the Nationals (but none from the Liberals) and the loss of seats from the Liberals to Labor. It is convenient to consider the latter element first. As noted earlier, there are only two reasons in spatial models why the Liberals might lose seats to Labor. The Liberals might lose seats either if they adopt more divergent policy positions from the ALP or if Labor adopts a policy stance that is closer to that proposed by the Liberals. There was no way to choose between these alternatives in the one-dimensional model. In the two-dimensional case, however, there is more evidence that will assist in choosing between those alternatives. Imagine, for instance, that the Liberals adopt a more divergent policy. If this happens and L moves to L', as in figure 3.5, then since the policies of A and N remain fixed, the new circumcentre must lie on WV below C, say at C'.

Figure 3.5: The Liberals shift away from the ALP



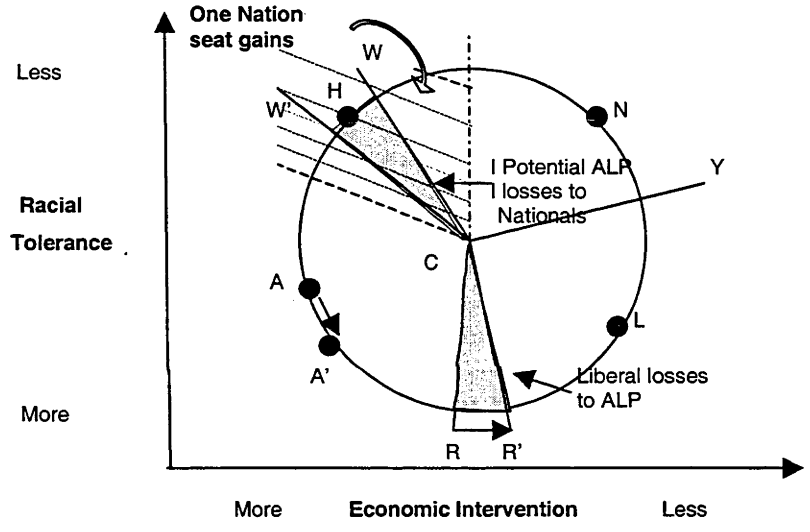
If the Liberals shift from L to L', then we should expect that they will lose seats in the region CC'RR' to the ALP. We should also expect, however, that a shift by the liberals of this sort will effect their level of support vis-a-vis the Nationals. Changing levels of support between the Liberals and Nationals are represented in figure 3.5 by the two shaded triangles.

Since no seats did change hands between the Nationals and Liberals, the Liberals cannot have moved away from the ALP in the way represented in figure 3.5.

Instead, it must be the case that Labor moved position vis-a-vis the other two parties. In moving closer to the Liberals, however, the ALP cannot also have moved closer to the Nationals, since doing so would have meant that Labor would gain seats from the Nationals (something that did not occur).

On this basis, the only policy change that is consistent with the actual results is the following - Labor moved around the circle of which C is the centre to take up a position like that at A' in figure 3.6.[4]

Figure 3.6: The introduction of One Nation and the ALP's shift toward the Liberals



If the ALP moves from A to A', as in figure 3.6, the Liberal/Labor dividing line moves radially from CR to CR'. The Liberals will lose to Labor those seats in which the median voter has an ideal point in the sector RCR', shaded in figure 3.6. Because the ALP's policy shift moves the party further away from some voters in the north-west quadrant, it should, in the absence of One Nation's entry, have lost seats to the Nationals. Specifically, it should have lost those seats with median voters whose ideal points lie in the sector WCW'. Since no seats were lost in this way, One Nation must have located in such a way as to win all the

[4] While I am unaware of any such shift on the part of the Queensland ALP specifically, the well documented long-term shift of the national ALP away from economic and social intervention might be expected to have some long lasting impact on voter perceptions of ALP policy at both state and commonwealth levels.

seats in WCW'. This implies, in turn, that One Nation must occupy a position no further from C than A' and N are. How is this conclusion reached? Suppose, on the contrary, that One Nation lies well outside the circle of which C is the centre. If this is the case, then points in WCW' in the neighbourhood of C would be closer to the Nationals than to One Nation or the ALP. Given this, we would expect a shift of seats from Labor to National, a shift that did not occur. Ergo, One Nation cannot lie outside the circle of centre C.

What other constraints on the location of One Nation do the election results impose? By similar logic, One Nation cannot lie inside the circle of which C is centre, because if HC were a shorter distance than LC, the Liberals would stand to lose seats to One Nation (which did not occur). Hence, One Nation must lie on the circle of centre C. In addition, One Nation must lie on that circle in the range between A and N so as to be consistent with the outcome that both Labor and the Nationals lost seats to One Nation. For example, if H were located below A, then the line dividing the north-western space into One Nation supporters and National supporters would pass to the left of WC and the Nationals would lose no seats to One Nation.

Given this characterisation of the issue space, the range of possible locations for One Nation implies that One Nation gains support from voters who are low on tolerance and high on intervention. The model suggests, further, that One Nation's success was partly attributable to Labor's shift towards less intervention. If the Labor Party had not moved from A to A', One Nation would not have won as many seats from Labor as it actually did. But in that event, Labor would not have won any seats from the Liberals. This reasoning is not meant to imply that the 'shift to the right' that the model suggests Labor must have made, was responsible for One Nation's emergence. There would have been scope for a new entrant, occupying a position between Labor and the Nationals in the relevant issue space, even with Labor located at A. But there is an argument that Labor's shift from A to A' did increase One Nation's tally of seats.

The chapter has so far produced at least one set of positions of parties in the issue space that is consistent with the electoral results observed. To what extent is that constellation necessary as well as sufficient to produce the observed results? In terms of the relative positions of the parties around the constructed circle, the constellation is both necessary and sufficient. That is, the party positions must lie on a circle such that starting say at any point on the circumference between A and L and moving clockwise around the circle, the parties are arrayed in the order A', H, N, L, A' or equivalently moving anti-clockwise, A', L, N, H, A'. But that circular structure is consistent with a variety of rankings along the two dimensions. For example, the horizontal dimension could accommodate the rankings: L>N>H>A'; or N>L>A'>H; or L>A'>N>H; or N>L>H>A'. And the vertical rankings could vary correspondingly. What must always be the case, however, is that H and L are antipodal in the sense that a line drawn between A' and N will have H on one side and L on the other.

3.6 Conclusion: What Can Rational Choice Theory Add to the Study of the 1998 Queensland State Election?

The explicit aim of this chapter was to see how far we could get with some of the few facts that we have about the 1998 Queensland state election. This section sums up what has been gained.

Importantly, in examining the results of the Queensland election, this chapter does not claim that policy alone determined the election result. Instead, it is likely that many of the factors mentioned in section 3.2, including socio-economic factors and Hanson's personal appeal, may be crucial in explaining the result. What this chapter does claim is that spatial modeling adds to the understanding of the 1998 Queensland state election and that it does so in four different ways.

First, this chapter makes use of a new approach to answer a question that, because of insufficient data, had previously been left unanswered. That is, using the logic of spatial models, this chapter shows that it is possible to gain further insight into the question of whether One Nation's rapid increase in seats represents a rise in

racism or simply an expression of existing sentiments. The chapter shows that the results of the election are consistent with Hanson's claim that One Nation simply gave a voice to previously alienated Queenslanders. In this sense, the model shows that One Nation's electoral success does not necessarily imply that there has been an increase in racial intolerance, or any other preference change, in the Queensland electorate. The model developed here also supports the argument advanced by Money (1999) and Jackman (1998) that while issues relating to race have long-term salience in Australia, the major parties have chosen not to emphasise them. If this is all that the rational choice approach contributes to our understandings of the Queensland election (and it is not - further conclusions are summarised below), this conclusion shows that it is sometimes worthwhile exploring the full implications of the little knowledge we have. Rational choice theory provides useful techniques to do just this.

Second, the chapter shows that there must have been more than one issue in play in the election, and specifically, more than the race issue alone. More fully, this must be the case if the necessary implications of a single-dimensional model (that the Nationals and Liberals occupy *opposing* policy positions and that One Nation is *not* the most extremist party on the race issue) are thought to be implausible.

Third, the results of the election can be consistently represented in a model of party interaction over two issues. The model developed here represents the Liberals as being, among all parties in the election, least like One Nation. That is, the model characterises the Liberals as adopting antipathetic policies to One Nation on both issue dimensions. In contrast, and fourth, the model highlights similarities between the ALP and One Nation policies on economic intervention. Importantly, there is no confirmation that the parties at the election occupied the exact policy positions represented here. Instead, the conclusion here is that it is possible to represent the shift in seats that occurred at the election in two dimensions (but not in one) and that while there are other ways to do this, the representation developed in this chapter is one plausible way to do it.

Fourth, as in later chapters, this chapter also presents some general lessons about the potential contributions that rational choice theory might make to the study of Australian politics. Perhaps the most significant implication from this chapter is the lesson that rational choice theorists often approach questions as one might approach a puzzle. As with a puzzle where you are given part, but not all, of the story, it is sometimes necessary to draw out the full implications from a few facts. What is more, as with these puzzles, this chapter shows that it is sometimes surprising how much information actually lurks in the juxtaposition of simple observations.

4 THE AUSTRALIAN PARLIAMENT AND POLICIES OF OPTIMAL COMPROMISE

4.1 Introduction

Debate over the proper role of the Senate has a long history in Australia. In recent times, much of this debate has been concerned with whether the Senate should rightly act as a policy actor, i.e. as an explicit and independent player in policy formation, or as a chamber confined to questions of review. While this debate has not been resolved, there is widespread agreement that Senate activism of various forms has increased since 1993 (Brennan 1998-1999; Young 1999; Uhr 1999, 95). The Howard Coalition government's attempts to reach a compromise with the Democrats so as to pass the Goods and Services Tax is exemplary of the tensions associated with the Senate's role as a policy actor in its own right. The object of this chapter is to make use of rational choice theory to examine and evaluate the role of the Senate as a policy negotiator.

There is, of course, already an extensive body of Australian literature dealing with the question of mandate (Emy 1997; Goot 1999; Goot 2000a; Mulgan 2000; Uhr 1997), the place of minor parties (Papadakis and Bean 1995; Young 1999) and the role of the Senate more generally (Mulgan 1996). Section 4.2 briefly outlines some of the major themes in this literature and concludes that while recent arguments are informative, existing accounts are limited by their focus on specific legislation. This chapter attempts, with the aid of rational choice techniques, to develop a more general account of policy negotiation in the parliament.

The first half of this chapter focuses on one of the central puzzles identified by rational choice theory - if politics is characterised by the contrasting and often competing interests of citizens, are there any policy outcomes that can be said to represent the 'best' compromise between these interests? This chapter argues that

there often are policy outcomes that fulfil these conditions and that these positions should be described as policies of 'optimal compromise'. In general terms, these are policies of the centre, as opposed to the extreme. That is, they are policies preferred by the mean or median voter in the electorate (where the median voter is the 'middle' voter when preferences are arrayed along a single spectrum).

Because this argument has received relatively little attention from rational choice theorists, the real work of the chapter begins in section 4.3 by setting up a normative argument, based on the median voter theorem, in favour of centrist policy outcomes. Section 4.4 continues in this vein and responds to several lines of criticism that might be directed against the notion of centrist results as optimal compromises.

From section 4.5, the chapter adjusts from a normative to an explanatory emphasis. That section begins by reviewing the logic of the median voter result as an explanatory model, where the result says that if certain conditions hold, then parties in a two-party race can do no better than to co-locate at the policy preferred by the median voter of the electorate. While the relaxation of some of Downs' conditions, as summarised in section 4.6, introduces new versions of Downs' model that sometimes alter its conclusions, Downs' basic model remains a useful analytic tool for describing party interaction.

Section 4.7 applies these analytic models to Australian circumstances, starting with an account of party interaction in the House of Representatives. In fact, the chapter argues that Downs' basic assumptions approximate the situation in the House of Representatives. As in Downs' model, political contests in the House of Representatives typically involve two major parties/coalitions. In addition, as in the median voter theorem, when one party secures control of the House of Representatives, it secures government and the passage of its legislation through that chamber.

Section 4.8 examines the situation in the Senate. The section argues that the strategies and payoffs facing actors in the Senate are different from those in the House of Representatives in two important respects. First, unlike the situation in

the lower chamber, the Senate is usually composed of more than two parties. Secondly, and more importantly, the governing party, determined on the basis of control over the House of Representatives, typically lacks a majority in the Senate. Because of this and because the Constitution states that bills must secure passage through both chambers before they can be enacted, the institutions of Australian bicameralism typically force the governing party to gain the support of minor parties or the major opposition before legislation can be passed through the Senate.

With these differences between the chambers established, sections 4.9 and 4.10 examine the potential policy coalitions that must form for legislation to pass through both chambers. In doing so, section 4.9 isolates several different coalitions (involving, for example, the government and minor centrist party or the government and minor extremist party) that warrant consideration.

After working through the logic of these coalitions, section 4.10 ties the normative and analytic strands of the chapter together and asks whether the policy negotiation typically associated with Australian bicameralism, and outlined in section 4.9, is likely to generate policies that approximate the optimal compromise. The section argues that the makeup and relationship between the two houses of the Australian Parliament provides Australia with policies that do approximate the optimal compromise if the major parties adopt divergent policies in the House of Representatives. At the same time, however, if the major parties already promise to implement similar centrist policies, as predicted by the median voter theorem, any bargains with the Senate may draw policy outcomes away from the optimal compromise. Section 4.11 concludes by summarising rational choice theory's contributions to the study of policy negotiations in the Australian Parliament.

4.2 Background

While some commentators in Australian political science characterise the Senate as an impediment to the practice of Australian democracy (e.g. Coonan 1999, 108; Maddox 1991, 218), Australia's upper chamber is more commonly lauded as an institution characterised by various positive features. In general terms, the tasks of upper chambers amount to the following:

> ...the examination and revision of bills brought from the lower house; the initiation of bills of a non-controversial nature; the 'interposition of so much delay (and no more) in the passing of a Bill into law as may enable the opinion of the nation to be adequately expressed upon it'; and full discussion of important questions when the lower house cannot find time for them (from Lord Bryce 1917, quoted in Maddox 1991, 208).

In short, this quotation emphasises the beneficial role of upper chambers as 'houses of review'. More recently, the list of positive features attributed to the Australian Senate has both increased and strengthened. New additions to this list highlight:

- the Senate's role in increasing executive accountability, particularly via its extensive committee system (Evans 1999, 74-76; Mulgan 1996; Thompson 1999, 47-50; Uhr 1999, 116)
- the Senate's enhanced 'representativeness', compared to the House of Representatives. This is apparent in the fact that, in spite of the constitutional requirement that equal numbers of Senators must represent each of the original states to the federation, seat assignment is sometimes closer to the actual party vote in the Senate than in the House of Representatives (Goot 1999, 254; Sharman 1998 158-159). The relatively large number of women in the Senate is also used to make the argument that the Senate is more representative of the general community than is the House of Representatives (Thompson 1999, 46).
- the Senate's support for increased community participation in Senate public hearings (Thompson 1999, 51).

This list is instructive, but excludes arguably the most important recent development in the Senate. That is, the list excludes the Senate's role as a policy negotiator. On this point, there is some argument that the Senate's role as a policy negotiator is implicit in its role as a house of review (Sharman 1998). Sharman's point is that upper chambers need to possess the threat of policy rejection or amendment in order to achieve real policy review. While this argument is persuasive, the determination of policy still seems to be of a different order to policy fine-tuning (Young 1997, 189). For analytic reasons alone, then, it seems important to distinguish between review and negotiation, even if these functions are related.

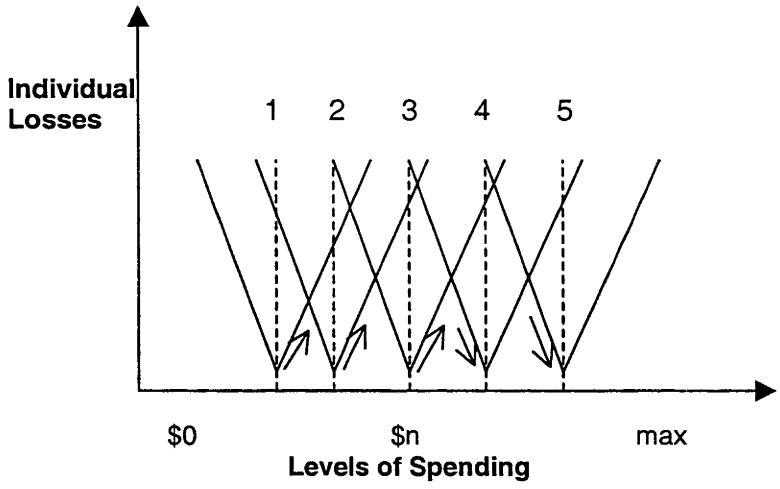
Recent Australian literature on the emerging role of the Senate as a policy actor has examined the role of minor parties in the rejection of the 1983 Australia Card Bill; negotiation over the passage of the Workplace Relations Bill in 1996 (Sugito 1997, 163-170); and negotiations over the passage of the 1981 and 1993 budgets (Young 1997; 1999). These studies are instructive in so far as they give an insight into both the circumstances in which we should expect negotiation and the likely policy outcomes. Each study is limited, however, to the degree that it focuses on policy negotiation around particular sets of bills, rather than on policy negotiation in a general sense. It is in this regard that rational choice theory can make its contribution. That is, while the application of rational choice theory to the issue of bicameral policy bargaining cannot hope to offer a comprehensive catalogue of policy negotiations and bargains over time, it does develop a general, as opposed to specific, account of policy interaction between parties in the Australian Parliament. Before doing this, however, the chapter advances an argument in favour of particular policy outcomes.

4.3 Why is the Median Voter Outcome an Optimal Compromise?

This section develops a normative argument in favour of the policy preferred by the median voter, where the median voter is the 'middle' voter when all voter ideal points are arrayed along a single issue. In fact, the policy preferred by the median voter has two desirable characteristics. First, this policy commands, under certain conditions, more support in pairwise majority rule contests than any other policy that might be on offer. Equivalently, the median voter's preferred policy is *opposed* by the fewest number of citizens (Powell 2000, 164). It is for this reason that Huber and Powell refer to the median as the policy that deserves the status of the "most preferred policy" (1994, 293).

Second, in certain circumstances, the median minimises total losses associated with the provision of a joint good. To see that this is the case, consider the following example. Imagine a community in which there are 5 voters who are deciding how much they should spend, as a community, on a public good. Imagine also that each voter in the community has a loss (or cost) function that is lowest at their preferred level of provision and that individual losses increase when the group's final decision is further from an individual's preferred spending level. Also note that the status quo position ($n) is the spending level preferred by the median voter (voter 3), as represented in figure 4.1.

Figure 4.1: The Optimal Compromise



In addition, assume that each individual suffers at the same fixed rate. That is, all the loss functions in figure 4.1 are linear and have the same slope. The only difference between voters in figure 4.1 is the level of spending that each most prefers.

Because individuals in this example prefer different levels of spending, any decision made by the group on the level of joint provision will necessarily impose costs on some members of the group. The relevant question is - which spending level minimises aggregate losses (when group losses are defined as the sum of individual losses)?

To see intuitively that the spending level preferred by the median voter minimises total losses, consider what happens, on an aggregate level, when the community decides to increase spending from $n (the amount preferred by the median voter) by $1. This move reduces the loss borne by voters 4 and 5 by $1 each because they would both prefer to spend more than $n. At the same time, however, this move increases the loss borne by voters 1, 2 and 3 by $1 each, i.e. we move up voter 1, 2 and 3's loss curves. The net impact of this move away from the spending level preferred by the median voter is an increase in aggregate losses of $1. If the spending level increases further, say to the level preferred by voter 5, then the losses borne by voters 1, 2, 3 and 4 increase further. All this is to say that

the total loss borne by the group increases as the level of provision moves further away from that preferred by the median voter. (An algebraic treatment of this proposition is given in appendix 1.)

It is in this sense that the median outcome represents an optimal compromise between the competing interests of citizens - the median maximises the benefits associated with the community's decision. That is, the median minimises the losses to those members of the community who do not get the outcome they most prefer.

If the preceding argument shows the apparent benefits of centrist decisions at the post-constitutional stage, then the following argument shows that the benefits of centrist outcomes will also be apparent at the pre-constitutional stage. To see the force of this argument, consider decisions as they might appear to an individual participating in Buchanan and Tullock's model of constitutional choice. Buchanan and Tullock specify that it is necessary for an actor choosing the best constitution to be "...*uncertain* as to what his own precise role will be in any one of the whole chain of later collective choices" ([1962] 1974, 78 italics in original). Such uncertainty (about class, race, gender and group characteristics), they argue, will lead an individual at the pre-constitutional stage to "...try to choose that decision-making rule which will *minimize* the present value of the expected costs that he must suffer..." ([1962] 1974, 70 italics in original). In other words, individuals will attempt to minimise average losses borne by citizens. (Note that the average loss is the total loss divided by the number of citizens). When loss functions are identical and linear, as assumed above, the point that minimises total losses is also the point that minimises *average* losses. This is the outcome preferred by the median voter.

The attractiveness of the median is thus apparent. Lacking knowledge of one's life chances and ethical position, and assuming risk aversion or neutrality, it is surely better to support the introduction of the median's preferred outcome, rather than extremist policy positions, because the expected average losses associated with the former are lower than those associated with extremist policy positions.

Of course, these arguments rely to a large degree on the assumption that individual loss functions have identical elasticities (i.e. the loss curves drawn in figure 4.1 have equal slopes) and that they are linear. Both of these assumptions may be incorrect. For instance, it is quite likely that individuals will have differing loss elasticities. That is, it is possible that individuals might need to be compensated for not consuming their ideal level of provision at different rates. The problem with accounting for this possibility is that the task of eliciting accurate indications of the strength of individual loss functions is notoriously difficult.[1] For this reason, and because democratic principles mostly suggest that individual preferences should be weighted equally, it seems reasonable to maintain the assumption that loss functions are identical.

The argument advanced above also clearly hinges on the assumption that loss functions are linear. This assumption holds only in a small range of cases and, in fact, does not even hold for the standard linear downward sloping demand curve. Instead, if an individual has a linear downward sloping demand curve for a particular good, then that person's loss function will have a quadratic form. This means that the marginal loss associated with provision at a level other than one's ideal increases the further away the final outcome is from that ideal. Where loss functions are of this form, the mean (average), rather than the median, of the ideal points of all individuals in the group will minimise losses, as is also shown in appendix 1.

The preceding discussion shows that whether the mean, median or some other measure strictly minimises total and average losses depends on the structure of preferences. What is clear, however, is that these measures are likely to be roughly similar. That is, these points are likely to fall at the centre, rather than at the extremes, of any particular preference distribution. For this reason, there is some argument in favour of the extension of the concept of an optimal compromise to cover the full range of centrist results, including the mean and the median. In general terms, this implies that there should be an a priori argument in

[1] See the special supplement to *Public Choice* (1997, 29(2)) for further discussion on this point. In particular, see Clark (1977, 29(2): 37-49); Groves and Ledyard (1977, 29(2): 107- 124); Tullock (1977, 29(2): 27-35). See also Miller and Hammond (1994).

favour of whichever centrist outcome minimises the aggregate loss function. (This is because these outcomes maximise the benefits associated with communal decisions, while minimising the losses to the individuals involved.)

Importantly, the argument in favour of centrist results as optimal compromises does not rely on the existence of a particular equilibrium point. Instead, where the policy preferred by the median voter minimises losses, there are good arguments for its implementation. When the median does not minimise losses, the normative argument in favour of optimal compromises still holds. In these cases, however, the concept of the optimal compromise covers a range of centrist policy outcomes.

4.4 Criticisms of the Optimal Compromise

There are at least five criticisms that could be directed against the preceding argument. The first criticism might come from liberals concerned about the dangers associated with the treatment of all preferences as being equally important. Liberal theory highlights the dangers of this assumption if democratic decision making is used to violate individual rights (Kukathas, Lovell and Maley 1990, 3-4). The sort of situation that liberals have in mind is illustrated by an example in which ten voters are asked to determine how much money one member of the group will be forced to give up to the group as a whole. Individual preferences might vary from $0 (the amount preferred by the individual in question) through to the individual's entire income (the amount preferred by a particularly vindictive member of the group). The optimal compromise approach, outlined above, suggests that the individual should be forced to give up the amount preferred by the median voter of the group. Clearly there is something wrong with this suggestion because the decision to treat all preferences equally sacrifices the liberties of an individual in the group.

The best way to view this liberal concern is as part of the long-running tension between democratic and liberal theory. In other words, this criticism is not specific to the concept of an optimal compromise, but applies to democratic concepts more generally. Like many liberal democrats, in making an argument in

favour of optimal compromises (or other democratic procedures), I assume that basic liberal rights are protected.

The second line of criticism might come from democrats concerned that the version of democracy embodied in the concept of an optimal compromise is insubstantial. These critics might argue that the concept is deficient because it does nothing to encourage popular participation in public life. In response, I would suggest that the preceding argument makes no assumption that the achievement of an optimal compromise should serve as the sole criterion for democratic success, just that it deserves to be one of the criteria. If democrats want to include reference to participatory success, then there is nothing associated with the optimal compromise approach that should stand in their way.

Third, critics might suggest that the arguments in favour of the concept of optimal compromise both assume that preferences are informed and that preferences guide voting behaviour. If, on the contrary, voter preferences are uninformed and reflect concerns that differ from those that the same voter would make if informed, then the policy preferred by the median voter will not be an optimal compromise. The same is true if, as suggested by Brennan and Lomasky (1993), voting behaviour is guided by factors other than preferences over policy.

Neither of these possibilities points to any weakness in the normative attractiveness of the concept. Instead, they show that it might be more difficult than it first appears to secure policies that approximate the optimal compromise. These criticisms might also be used as the basis for an argument in favour of representative, as opposed to direct, democracy (see Brennan and Hamlin 1999). That is, if voter preferences over policy are likely to be poorly informed *and* voters are likely to elect representatives "...they believe to be decent, honourable, sincere, morally serious, publicly concerned, competent, careful and conscientious" (Brennan and Hamlin 1999, 124), then representative democracy is more likely than direct democracy to generate policy outcomes that approximate the optimal compromise.

Fourth, critics might also argue that the concept of an optimal compromise among competing interests is limited because important political issues cannot be ranked in the way that is necessary to determine the policy of optimal compromise. This happens when certain ideological positions are literally incommensurable. For example, critics might argue that to attempt to rank positions on the abortion debate is to ignore the incompatible world views of opponents.

This criticism is right insofar that the optimal compromise approach will not be suitable for debates that are characterised by truly incommensurable views. Even if views are thought to be incommensurable, however, the approach may be useful either because it provides new insights into the structure of the debate or because the approach clarifies the nature of the alternatives on offer. For example, the abortion issue may appear to be a debate for which there is no middle ground; one is either in favour or against it. A closer look at that debate reveals that despite high levels of polarisation on the issue, there remains a spectrum of views regarding abortion. We might speculate that the issue spectrum ranges from those who see no reason for abortion at all to those who argue that abortions should be permitted in certain circumstances to those who believe that abortion should be allowed at all times and for any reason.

Those engaged in this and other highly charged debates who argue that there is no sense in which the median policy position can be viewed as an optimal compromise, do so, presumably, on the basis of the belief that there can be no compromise on an issue so important. The concept of an optimal compromise tells us, however, that in situations where citizens have long-lasting disagreements, centrist policies have attractive qualities that other solutions lack. That is, provided that individuals with 'extreme' views think that the 'middle outcome' is better than the extreme outcome that they do *not* support, i.e. provided that individuals have single-peaked preferences, the 'optimal compromise' logic holds.

Fifth, critics might say that even if the concept of an optimal compromise between competing concerns is normatively attractive, it is not possible to secure the optimal compromise without suffering from certain negative side effects.

The logic of this argument is that if the optimal compromise is secured only when Downs' median voter theorem holds (and parties co-locate at the policy preferred by the median), then this is cause for despair because co-location reduces policy choice and voter involvement in the political process.

There are two lines of response to this criticism. The first is to point out that optimal compromises might be achieved in numerous ways. For instance, policies of optimal compromise might be achieved through policy negotiation between parties with distinct policy concerns, as well as through party co-location at the median. (That this is the case is further emphasised in the next sections.) If policies of optimal compromise can be achieved in different ways, then the premise of this criticism is incorrect.

Even putting this point aside, however, it is not clear that the normative judgment that underpins this criticism withstands scrutiny. That is, a second response questions the normative judgement that politics of the 'tweedle-dum, tweedle-dee' variety is unattractive. On the contrary, party co-location in the short run may be a sign that the political system is working well. That is, if the median voter result is right, party co-location (and the consequent lack of policy choice) results from voter, rather than party or candidate, preferences over policy. Parties offer similar policies not because there is a conspiracy to deny voters choice in policy, but because the median policy position secures the greatest number of supporters for parties (Ordeshook 1992, 105). According to this account, party co-location will result precisely when citizen concerns are well represented.

The argument that co-location negatively restricts choice has greater strength if there is some connection between party co-location and civic disengagement from the political process. If participation in elections is like a habit that loses strength unless it is exercised, then civic disengagement in one election may, over time, turn into voter estrangement. The problem with estranged, as opposed to disengaged, voters is that whereas disengaged voters retain the threat that they may vote if their interests are jeopardised, estranged voters lose this power. In the end, estranged voters are effectively excluded from the political process. If this scenario arises and the electoral process ignores the interests of large numbers of

the population, then it is unlikely that the policy of optimal compromise will be secured.

One rational choice response to these observations is that it is important to determine empirically the source of non-voting among citizens. As argued above, if inaction results because an optimal compromise is secured, then lack of voter choice may not be a concern. If, however, non-voting results from voter estrangement, then rational choice theorising on the topic can be used to make an argument in favour of some institutional change that increases turnout. The logic of this argument is straightforward. The idea of centrist results as optimal compromises relies on the assumption that the interests of all voters in the community have force, whether exercised or not, in the reckoning of political parties. If the votes of some citizens no longer have such force, then there is a risk that decisions will reflect the concerns of a subset, rather than the whole, population. In other words, there is a risk that optimal compromises will not be achieved. As such, if compulsory voting or some other institutional mechanism decreases voter estrangement, then it is also a precondition for optimal compromises.

There is one further line of criticism that warrants mention, although its focus is directed *less* at the concept of an optimal compromise and more at the forthcoming analysis. According to it, the attempt to model policy interaction between parties in the Australian Parliament is limited because it is developed over a single-issue dimension. After all, the criticism runs, election campaigns, expert surveys, opinion polls and common sense all tell us that political debates are multi-dimensional, rather than single-dimensional.

Importantly, this criticism is analytic, rather than normative. It does not apply to the normative argument developed in favour of an optimal compromise because that argument is generalisable to n-dimensions. This is because, as argued earlier, the concept of an optimal compromise applies to a range of centrist results and is not dependent on the presence of any particular equilibrium point. The criticism does apply, however, to the attempt to analytically model the policy interactions that occur within the Australian Parliament.

In defence of that effort, there is good reason to believe that one or two-dimensional accounts often serve as useful simplifications of political contests. For instance, according to Poole and Rosenthal (1997), who use scaling methods to reduce complex debates to one or two dimensions, most voting decisions in the American Congress throughout American history can be captured along a single ideological issue dimension. At times of crisis, such as debates over slavery in the 1830s and 1840s and the civil rights controversies from the 1940s until the 1960s a second issue dimension is required to account for voting behaviour, but these periods are relatively infrequent (1997, 5).

While Poole and Rosenthal's scales have a statistical, rather than a political meaning, others argue that the left-right issue dimension remains a useful way to represent political debates. On this point, there is evidence to support the view that the positions taken by voters on the left-right scale are a major factor in determining their actual party affiliation (Huber 1985, 599; Inglehart and Klingemann 1976). In addition, on the basis of cross-country expert surveys, Huber and Inglehart argue that while the meaning of the terms 'left' and 'right' differs across countries, there is a strong tendency for experts worldwide to see politics in terms of this single dimension (Huber and Inglehart 1995, 90).

In the Australian context, McAllister and Moore (1991) analyse the content of Australian party manifestos in the post-war period until 1990 and conclude that:

> [t]wo dimensions are clearly evident in the results. The horizontal dimension is primarily economic in orientation, placing economic individualism and corporatism, along with social conservatism, in opposition to economic collectivism and social liberalism. The vertical dimension places internationalism and pluralism in opposition to more domestic concerns and a more homogeneous view of society (1991, 12)

There is also the suggestion from Grofman (1993, 1557-1559) that two-party systems themselves might naturally reduce the number of issues that arise in

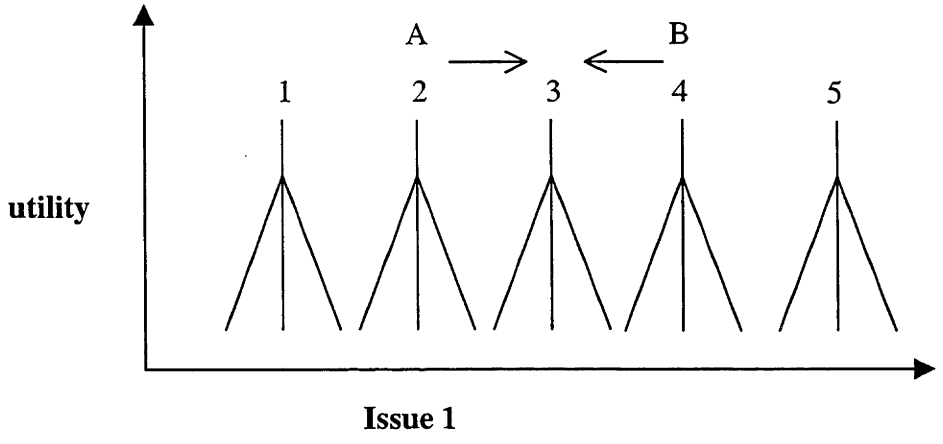
politics to a single dimension that represents the choice between the major parties. As such, the common sense argument in favour of multidimensional analysis does not carry as much weight as first appears. On the contrary, one or two-dimensional accounts often do a good job at capturing the most important elements in political debates.

4.5 What is the Median Voter Theorem?

With a normative argument in favour of centrist, as opposed to extremist, policies established, the next question in this chapter is an explanatory one. That is, the remainder of this chapter asks whether centrist policies are likely to emerge from the Australian Parliament. The answer to this question is far from straightforward. The natural point of departure is to make use of Downs' median voter result, where Downs shows that, under certain conditions, parties in a two-party race will be driven to represent the policy preferred by the median or 'middle' voter. This section outlines the logic of that result.

The logic of the median voter theorem is best understood by examining figure 4.2 and its map of the preferences of five voters over a single issue, where the exact nature of the issue is unimportant. The peaks in the diagram represent each voter's preferred option (ideal point). Note that each voter has single peaked preferences, i.e. voter utility declines as they are faced with policies that are increasingly distant from their ideal position. Because preferences are of this form, we can determine how individuals will vote when faced with a choice between policies simply by determining how far each of these options are from the voter's ideal policy. If, for instance, party A initially promises to implement the policy preferred by voter 2 and party B promises to implement the policy preferred by voter 4, then we conclude that voters 1 and 2 will support party A and that voters 4 and 5 will support party B. In this case, voter 3 is indifferent between policies A and B because she is equidistant from them.

Figure 4.2: The Median Voter Result



The logic of the median voter result is that any party can increase its chance of winning the election by promising to implement the policy preferred by the median voter in the electorate (voter 3 in figure 4.2). For instance, if party B maintains its earlier promise to implement policy 4, but party A promises to implement policy 3 (rather than policy 2), then party A will retain the votes of 1 and 2 and will gain, in addition, voter 3's support.[2] With three votes to party B's two votes, party A will win the election. Of course, party B can similarly improve its chances of election by promising to implement policy 3. In the end, both parties will tend to co-locate at the median's preferred policy.

The median voter result reaches a remarkably simple conclusion. The assumptions underlying the result, however, are quite extensive and apply to the behaviour of candidates, voters and the conduct of elections.

[2] Voters 1 and 2 prefer party A's position less now, but will still support party A because its policy platform is more desirable than is party B's platform.

The most significant of these assumptions are:

The Behaviour of Parties/Candidates

- Parties/candidates aim to maximise the probability of winning elections.

  As such, parties are flexible about their policies.

- There is no intra-party friction over policy. This means that the terms 'candidate' and 'party' are interchangeable.

- Party policy positions are well defined.

- Parties are free to adopt any position on the policy spectrum.

The Behaviour of Voters

- All those who are eligible to vote do so.

- Voters cast their ballots on the basis of policy. Partisan feelings based on considerations other than policy do not play a role in the voting calculus.

- Voter preferences do not change during the campaign period.

- Voter ideals fall along a single-issue dimension.

- Voter preferences are single-peaked along the same issue dimension (as in figure 4.2).

Conduct of Elections

- Elections involve two parties or candidates.

- Elections take place in single member constituencies.

- There is a single election, i.e. there are no run-off elections.

- The election is decided by a majority vote (Downs 1957; Grofman 1995b, 181).

There are four points worth making about these assumptions. First, it is widely recognised *within rational choice theory* that many of these assumptions are

highly unrealistic. As such, there exists an extensive body of literature that has extended, challenged or reworked many of these assumptions (Mueller [1989] 1993, 180). This chapter reports on some of that literature, specifically that dealing with pre-selection contests, electoral contests between more than two candidates and differing electoral systems.

Second, it is clear from this list of assumptions that this model does not assume that voters are self-interested. The median voter result requires only that voters cast their votes according to their policy preferences. The model says nothing about the content of preferences.[3] Third, and on a related point, while voters are assumed to care about policy, this does not imply that voters are highly informed. Downs' rational ignorance hypothesis predicts high levels of voter ignorance about policy, based on the trivially small likelihood that an individual ballot will prove decisive. On this basis, ideology, advertising and the opinions of friends and experts are all likely to play important roles in voter decision-making (Downs 1957, 98-100; 227-233).

Fourth, although there is no explicit statement in this list to the effect that parties compete on the basis of policy concerns, this assumption follows from two others in the list. Combined, the assumptions that parties aim to win elections and that citizens vote on the basis of policy concerns imply that parties will compete on policy platforms even though parties are not committed to the pursuit of policy goals in and of themselves.

4.6 Developments Since Downs

As mentioned earlier, the median voter result has been extended in many different directions so as to increase its realism. This section outlines several of these developments, starting with an account of three factors that are sufficient to cause parties in Downs' median voter model to diverge from the median.

[3] See chapter 2 for more discussion of the median voter's reliance on the self-interest assumption.

Major Party Divergence From the Median Voter's Preferred Policy

As mentioned previously, many of Downs' original assumptions have since been modified. In relaxing some of these assumptions, it has become clear that there are, in fact, many reasons why parties competing for votes over a single policy issue may not co-locate at the median, as predicted by the median voter theorem.[4] Some of the most common reasons adduced in the rational choice literature for major party divergence are:

1. the need for successful candidates to first gain pre-selection in the party (Aranson and Ordeshook 1972; Coleman 1971; Coleman 1972)
2. the presence of alienated voters (Downs 1957, 118-122; Riker and Ordeshook, 1973, 349-350)
3. the threat of entry by new parties/candidates (Chamberlin 1938, 209-211; Palfrey, 1984).

The remainder of this section examines the logic behind each of these possibilities, starting with the impact of candidate pre-selection on the median voter theorem.

Candidate Pre-Selection

Downs' basic model of party competition subsumes any distinction between party and candidate. Instead, candidates in the basic model simply take their policy platforms straight to the voter. If this assumption is relaxed, then we should expect that intra-party decision making will impact significantly on the policies of candidates. After all, before contesting the general election, candidates in this new model must first gain pre-selection within a party composed of members with policy preferences that are typically different from the preferences of the wider community. In addition, because members of each party know that members within the other major party are likely to suffer from similar pressures, there is

[4] The empirical literature on this topic also shows that parties do not consistently co-locate at the policy preferred by the median (Powell 2000, 183). See also Grofman, Griffen and Glazer (1990).

thus scope for candidates in both major parties to diverge from the policy preferred by the median voter of the electorate.

Given Downs' median voter result, we might reason that a candidate in a pre-selection contest will simply adopt the policy preferred by the median member of the party, so as to secure pre-selection and will later adjust his/her policy (by moving toward the policy preferred by the median of the electorate) so as to secure success at the general election. The weakness of this line of reasoning is that it ignores the problem of credibility.[5] That is, if party members (or voters in general) can determine whether candidate commitments are credible or not, then candidates who lack credibility will have difficulty securing pre-selection and election whether their policy promises are attractive or not. Under these conditions, credibility is such a valuable characteristic for candidates within pre-selection and general election contests that we should expect that candidates will typically attempt to keep their campaign commitments.

There is one more complication that warrants mention. Clearly, while party members are likely to support the candidate promising to implement their favoured policy position, party members will only benefit if that candidate succeeds at the general election. In other words, there is no point in supporting a candidate who appeals to the party if his/her chances of success at the general election are minimal. At the same time, however, it is clear that party members will also be reluctant to support a candidate who espouses the policy preferred by the median of the electorate. While this candidate has the greatest chance of wider electoral success, the policies of the median will typically be less satisfactory to party members (Coleman 1972, 334).

All of this means that we should expect that parties will not co-locate at the policy preferred by the median voter of the electorate if candidates must first gain pre-selection within the party. At the same time, we should also expect that the policy platforms of parties will not diverge as far as the median policy of their respective

[5] There is a significant literature on this issue. See, for instance, Alesina and Rosenthal (1995, 16-30) for an account of party divergence in the face of uncertainty, policy commitments and concerns about candidate credibility.

party memberships. Instead, the concern to pre-select a candidate with a good chance of success will tend to pull policy back toward the policy preferred by the median of the electorate. Specifically, candidates should adopt some position between the policy preferred by the medians of the party and the electorate. In doing so, the candidate can appeal to the desires of party members to endorse a candidate with a favourable policy position, while maximising the party's chance of success in the general election (Coleman 1971, 36, 47).

Alienated voters

While Downs' median voter model assumes that all eligible citizens vote, Downs himself argued that voters might not vote if they feel alienated from the political contest (Downs 1957, 118-122). In other words, citizens might abstain from voting if the 'nearest' candidate offers to implement a policy too far away from the voter's preferred policy to make voting worthwhile (Hinich and Ordeshook 1969, 87).[6] If alienation characterises voting, then the likelihood that a voter will support a particular candidate decreases as the candidate adopts more distant policies.

By itself, alienation is not sufficient to cause parties to diverge from the median (Hinich and Ordeshook 1969). Alienation might nonetheless contribute to party divergence if other conditions exist. More specifically, if voter preferences are bimodally distributed along the issue dimension and voters are highly 'sensitive' to policy, i.e. they vote only when policy is close to their favoured option, then candidates will maximise their chances of electoral success by diverging from the centre of the issue dimension. In this case, candidates maximise their chances of securing election by adopting a policy stance that is between the policies preferred by the two modal voters and mean voter (Riker and Ordeshook 1973, 349-350).

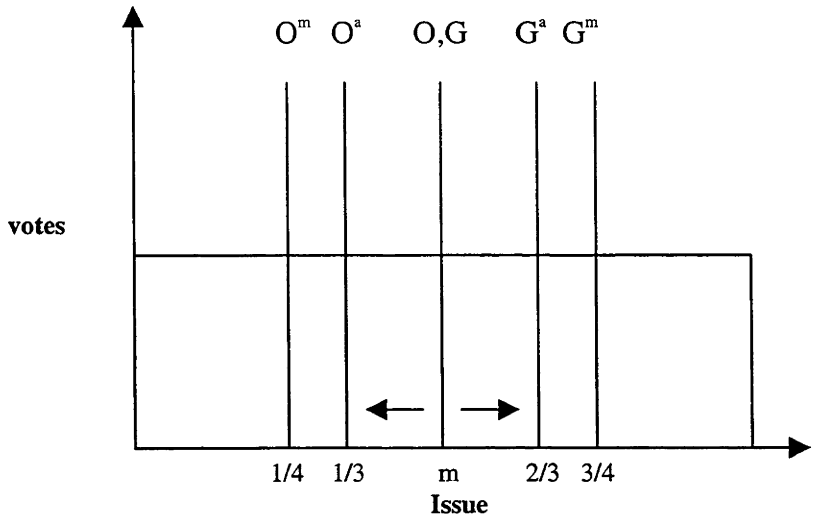
[6] Similarly, voters might abstain if voting is motivated by expressive, rather than instrumental, concerns. See Brennan and Hamlin (1999).

The Threat of Entry

Major parties might similarly diverge from the policy preferred by the median if threatened by the entry of a third party. How far the parties will diverge from the median depends, however, on the structure of the election. More specifically, it depends on whether the race for parties is 'winner-takes-all' or 'winner-takes-most'. Electoral races that are winner-takes-all deliver the successful candidate everything and the loser nothing (a little like the US Presidential race). Electoral contests of the winner-takes-most form are more similar to the situation that faces parties in the Australian House of Representatives. In these contests, the major parties face three possible outcomes: win government, lose government but gain the status of the major opposition party or lose both government and opposition. Because the largest opposition party gains the status of 'The Opposition' and the attention and material benefits that go with that status, this outcome is presumably worse than gaining government outright, but better than losing out altogether.

Whether the electoral race is 'winner-takes-all' or 'winner-takes-most' will not impact on the decision of major parties to diverge from the centre if threatened by the entry of a new party, but it will impact on the degree to which the major parties can be expected to diverge. To see what can be expected from the major parties seeking government, consider the highly stylised example in figure 4.3, where incumbent parties are located at G (government) and O (main opposition party).

Figure 4.3: The Threat of Entry and Party Divergence from the Median



The model used here is the same as Downs' median voter model in all respects other than Downs' assumption that competition involves only two parties. As such, the model still assumes that parties seek election, that voters support the party promising to implement the closest policy platform and so on. Figure 4.3 also maintains Downs' assumption that voter preferences are uniformly distributed over a single policy issue where, as mentioned earlier, the actual policy dimension might be the left-right ideology dimension, pro-tax reform/anti-tax reform or spending levels. This means that each policy position is the ideal of the same number of voters. Uniform preference distributions (i.e. equal numbers of voters favour each policy position) are, of course, highly unlikely. The assumption is maintained, however, simply for ease of presentation. While more accurate preference distributions might provide better predictions of the actual policy positions that candidates might adopt, they will not alter the logic of the account developed here.

With the basics of the model established, consider the situation that arises if, as predicted by the median voter theorem, the government and major opposition are initially located at the policy preferred by the median (m) of the preference distribution. If we introduce the possibility that a third party might enter and the race is winner-takes-all, then the new entrant should adopt a policy just to the left

or the right of the median. In doing so, the new party can gain close to 50% of the total vote, thus winning the plurality vote.

Strategic incumbents can prevent this outcome from eventuating by diverging from the policy preferred by the median. In particular, if the opposition moves to O^a (the policy preferred by a voter 1/3 of the way through the distribution) and the government adopts G^a (the policy preferred by the voter 2/3 through the distribution), as in figure 4.3, then there is no way that a new entrant can win government. Instead, given this party alignment, the best that a new entrant can do is to enter with a policy just to the left of O^a or the right of G^a. At both of these policy positions, a new entrant can expect to win no more than 1/3 of the vote, with 1/6 of the vote going to the closest major party and 1/2 the vote going to the major party furthest from the new entrant. It is clear that the major party furthest from the new entrant will win the election in this scenario. If this result is repeated over time, then we would expect that the third party would drop out of the race.[7]

The same basic story holds when the race is of the 'winner-takes-most' form. The difference in this case, however, is that the incumbent parties will attempt to situate themselves so as to prevent the new entrant from securing either the role of government or opposition. To do so, the incumbents must diverge further from the centre than in the 'winner-takes-all' case. In fact, if the incumbent parties remain at O^a and G^a, then the new entrant can enter just to the left or right of one incumbent and, after winning 1/3 of the vote, secure the status of the major opposition party.

The major parties can prevent this outcome from eventuating by diverging to O^m and G^m (the policies preferred by the voters 1/4 and 3/4 of the way through the distribution). If this happens, then a new party entering either to the left or the right of the incumbents will gain at most 1/4 of the vote. In this scenario, the incumbent furthest from the new entrant will gain 1/2 the vote and will win the

[7] Of course, there are reasons, outside this model, that explain why parties might stay in the race even though they have very little chance of winning a seat and no chance of gaining government. Whatever the nature of these reasons, these parties play no role in the policy considerations of major parties in this model.

election outright and the incumbent closest to the new entrant will accrue slightly more than 1/4 of the vote and will become the opposition party. Similarly, if the new entrant adopts the policy preferred by the median voter, then it will gain 1/4 of the voter and the major parties will split the remaining 3/4 between them. One of the major parties will form government (possibly as a minority government) and the other major party will become the opposition. Again, the new entrant will miss out on both government and opposition. This implies that, whether the electoral race is 'winner-takes-all' or 'winner-takes-most', the threat of entry gives incumbent parties an incentive to adopt divergent policy positions (Brennan and Hamlin 2000, 204).[8]

So far this discussion has been entirely within a static framework. Parties adjust their policies once in anticipation of the entry of another party, but otherwise do not alter their policies. This policy inertness captures something of the political race between parties. Concerns about reputation and credibility will no doubt constrain the ability of parties to alter their platforms in an opportunistic manner. At the same time, there will be a tendency over the longer term for incumbent parties to move back toward the centre, so as to capture more votes. Whether incumbents will be free to act on this tendency will depend partly on the ease with which new parties might enter the race. If entry is straightforward, then parties will be less likely to risk gaining votes from the centre at the expense of votes from the extremes of the preference distribution. If entry is difficult, however, (perhaps because of the need to make upfront deposits to the electoral commission or to collect a large number of party members), then we should expect that the incumbent parties will move toward the centre of the preference distribution.

To summarise, if the median voter theorem accurately captures the basic relationships within the Australian Parliament, then the major parties will typically promise to implement centrist policies that approximate the optimal compromise. If, however, factors such as alienation, the threat of entry by a third party or pre-selection contests play a significant role, then we can expect that the

[8] Major parties in a contest over two seats in a single electorate will similarly diverge to (1/4, 3/4). If more than two seats are available, however, there may be no stable equilibrium (Greenberg and Shepsle 1987, 529).

major parties will diverge from the policies of optimal compromise. This chapter returns to the issue of major party convergence/divergence in the next section. Now, however, consider some research that focuses on bicameral parliaments and specifically on the question of policy stability in bicameral legislatures.

Bicameralism and Policy Instability

Chapter 1 has already outlined a succession of social choice findings on policy instability in decision making over two or more issues. However, it is worthwhile repeating the core of these conclusions before moving on to those findings that relate more directly to bicameralism. In short, when rational choice theorists speak about policy instability, their concern is that majority rule decisions may be arbitrary. That is, their fear is that particular decisions may fail to reflect any underlying group preference for the winning alternative and may instead simply reflect the order in which the vote was conducted. What is more, if there is no stable majority winner that beats all other alternatives, then an individual with control over the agenda can ensure, through a series of majority votes, that the group agrees to the implementation of any policy in the issue space.

There are, in addition, a series of results that relate specifically to questions of stability in bicameral chambers. In short, social choice theorists show that bicameralism may be sufficient, in certain circumstances, to disrupt cycling of the sort highlighted in chapter 1.[9] To see that this is the case, figure 4.4 reproduces an example of cyclical preferences from chapter 1, where legislators A, B, C, D, E, F and K are voting on four policy positions: 1, 2, 3 and K (the policy preferred by legislator K). In chapter 1, it was shown that a cycle between options K, 1, 2 and 3 exists. That is, option 1 is majority preferred by legislators C, D, E and F to option K, option 2 is majority preferred by legislators F, K, A and B to option 1,

[9] Discussions over the stability inducing properties of bicameralism can be traced to the Federalists. Madison (no. 62) asserts that, to the degree that the two chambers are differently constituted, the need to reach agreement to pass any legislation will reduce the quantity of 'sinister' legislation that is passed, compared to a single chamber (379, 1961). Hamilton (no.73) provides a different argument. He says "...the power of preventing bad laws includes that of preventing good ones; and may be used to the one purpose as well as to the other"(443, 1961). The rationale for creating multiple checks and balances is, for Hamilton, that these systems create stability and that stability is, in and of itself, a valuable institutional characteristic (Chappell and Keech 1989, 51).

option 3 is majority preferred by A, B K and C to option 2 and option K is majority preferred by A, K, F and E to 3 and so on.

Figure 4.4: Policy Cycling

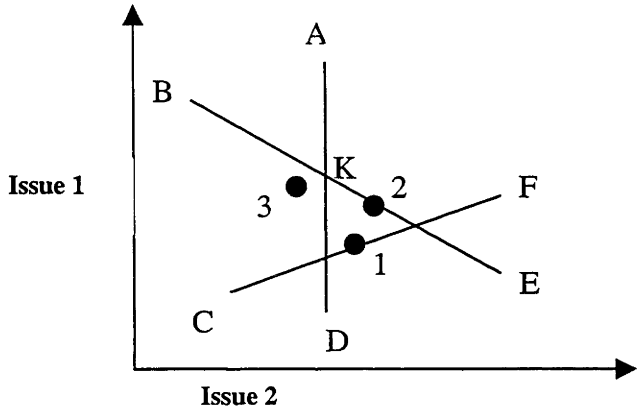
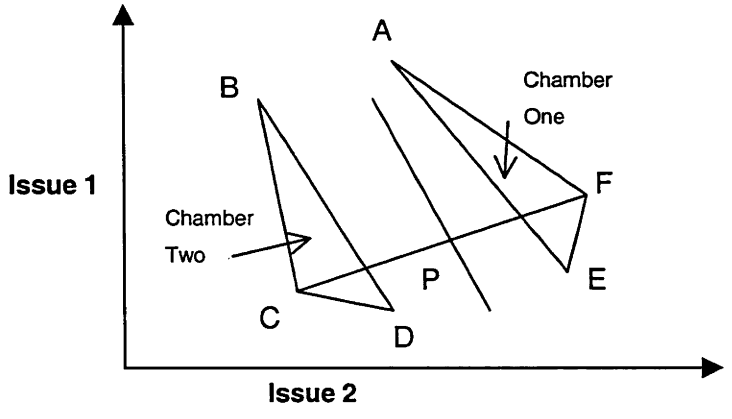


Figure 4.5 reproduces the policy positions of legislators from figure 4.4, but superimposes a bicameral division on the candidates.[10] Under this bicameral division, legislators A, E and F form the first chamber and B, C and D form the second chamber.

Figure 4.5: Policy Stability under Bicameralism



Remarkably, this institutional imposition is sufficient to generate stable policy outcomes. To see why this is the case, notice that the bicameral imposition divides voters into equal sized chambers with opposed, but balanced, interests.

[10] Figure 4.5 also excludes legislator K for ease of presentation.

The bicameral division also generates internally balanced chambers. As such, the result is intuitively similar to Plott's findings on stability. In both scenarios, the preferences of all legislators can be divided into opposing pairs leaving, as in Plott's theorem, a single stable policy or, as here, a series of stable policies that cannot be beaten by other alternatives.

It is also clear from figure 4.5 that bicameralism creates two pivotal actors (candidates C and F), when previously there were none. Individuals C and F are pivotal in the sense that the passage of any legislation through each house requires their support. In effect, the line joining C and F becomes the contract curve, or in terminology used below - the bicameral median, between the two houses. The line CF is important because majorities in both chambers will favour the adoption of policies along CF over any policy not on CF. Once on the contract curve, however, any gains to one house will be at the expense of the other. As such, the final bargain between the pivotal actors will deliver a stable compromise policy position that can not be beaten by majorities in both houses that falls somewhere along line CF (Brennan and Hamlin 2000, 239-240). In formal terms, the conditions required for stability are twofold. First, there exists a line (the bicameral median) such that, in both houses, equal numbers of legislators lie on opposite sides of this line. Second, there exists a line perpendicular to the bicameral median that separates the legislative chambers (the line through p in figure 4.5) (Tsebelis and Money 1997, 82).

As mentioned above, this result is similar to Plott's findings on stability in multiple dimensions. The difference in the bicameral example is that groups of actors are divided into two chambers with opposing interests. Two points follow from this observation. First, note that the equilibria (the set of policies that cannot be beaten in majority rule contests by other policies) in the bicameral example may not be the preferred policy position of any single actor. Second, note that a wide range of policy combinations, varying from relatively high provision of both issues (preferred by chamber 1) to relatively low provision of both issues (preferred by chamber 2) are all equilibrium policies. Whether the final policy agreement will involve high or low provision or some compromise will depend on the bargaining powers of the chambers and the position of the status quo.

As with Plott's conditions, the requirements for stability within a bicameral parliament are clearly stringent. If either condition stated by Tsebelis and Money is broken, then instability may result. So, for instance, if the policy preferences of the chambers overlap, as in figure 4.6, then bicameralism will be insufficient to prevent policy cycling.

Figure 4.6: Policy Cycling in Bicameral Chambers

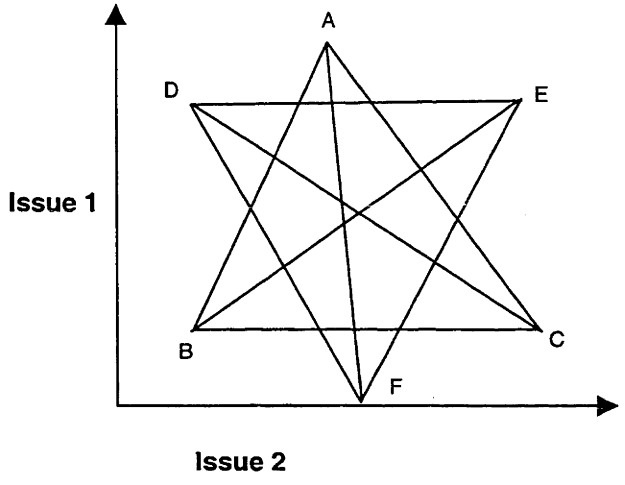


Figure 4.6, from Tsebelis and Money (1997, 83) maps two chambers, one composed of A, B and C and the other of D, E and F. From inspection it is clear that neither of Tsebelis and Money's conditions hold in figure 4.6. That is, there are more than two mutually regarding medians and there is no separation of the chambers. The only way that this arrangement of policy preferences might deliver stable policies is if, as in Plott's conditions, the three bicameral medians cross each other at the same central point. If this happens, then this point will be the equilibrium. The likelihood of this, however, is slim.

The greater lesson from this extended discussion of social choice theoretic findings is that while bicameralism by no means guarantees policy stability, there are certain special conditions under which a bicameral partition creates institutional structures that will overcome preference cycles in legislatures.

The Stability-Inducing Properties of Australian Institutions

As mentioned at the beginning of this section, there are reasons to suspect that rational choice concerns over policy stability, either in a bicameral or unicameral setting, are of limited concern for Australian policy analysts. More specifically, as outlined in chapter 1, Shepsle and Weingast's (Shepsle 1979, 1986, 1995; Shepsle and Weingast 1981) research on institutions shows there is good reason to believe that a range of political institutions other than bicameralism may sometimes prevent policy cycles from taking hold. In this vein, the following account examines the stability-inducing properties of two institutional features of the Australian Parliament - disciplined parties and the use of differing voting systems to elect representatives in the House of Representatives and Senate. While doing this, the sub-section also shows how further investigation of the Australian experience might add to rational choice theorising on cycling and policy instability.

Party Discipline

Internal party discipline, manifest in consistent intra-party parliamentary voting, is a longstanding characteristic of the major parties in the Australian Parliament (The Senate/Department of the Senate 1987, 12; Smith 1994, 106-108; Warhurst [1997] 2000, 177-178). Such discipline is explained partly with reference to parliamentary experience. Since 1910 few parliamentarians have succeeded in gaining a seat without the backing of one of the major parties (Aitkin, Jinks and Warhurst 1989, 167; Rydon 1986, 188). Party discipline is also partly explained by the perceived need to present a unified front and to give voters confidence in party platforms (Maddox 1991, 253). While these concerns suggest the benefits[11] to parties of discipline, alone they do not explain either why party discipline is tighter in the Australian Parliament than in other legislatures or why discipline is stronger in the major parties than in the minor parties.

[11] There are also a range of negative consequences for liberal democracies associated with the presence of disciplined parties (Kukathas, Lovell and Maley 1990, 136-137).

Much of the answer to these questions is attributable to two institutional factors. First, without internal discipline, the executive in Australia faces the real risk of losing government. This is a constant check on internal government discipline in parliamentary systems that is clearly not apparent in presidential systems of government (Epstein 1967, 315-350). Second, party discipline is similarly important for the major opposition party in so much as that party needs "...to show itself capable of maintaining a government should it become the majority party" (Maor 1997, 138).

These institutional imperatives help explain why strong parties dominate the House of Representatives, but by themselves do not explain the presence of strong major parties in the Senate. In fact, party discipline is equally important for major parties in the Senate and is explained by the largely co-equal status of the chambers in the Australian Parliament. Because both chambers must pass all bills, including money bills, the government needs to maintain discipline if it is to see its legislation enacted. It is for this reason, then, that major party discipline is crucial *across* the chambers, as well as within the House of Representatives. Without discipline, the major parties risk the prospect of losing government, failure to pass their legislative programs or failure to provide a convincing alternative government. Accordingly, where the major parties adopt centrist or divergent policies in the Senate, they do so not because the median voter theorem holds or breaks down in that chamber, but because the major parties in the Senate are bound to offer policies consistent with those put forward in the lower house.[12]

The fact that the Australian Parliament is characterised by disciplined major parties ensures that there is significant policy overlap between the chambers. Given the social choice findings that policy overlap within a bicameral parliament increases the likelihood of policy instability and cycling, we might predict that the Australian Parliament would be characterised by inter-chamber instability. This judgement, however, is premature. While the party system creates the potential for policy cycling between the chambers, the fact that most members and Senators owe their election to one of the major parties typically ensures that such potential

[12] Similarly, Senators are described as being 'Government' or 'Opposition' solely on the basis of circumstances in the House of Representatives (Reid and Forrest 1989,64).

is not acted on.[13] Members and Senators within the major parties will presumably disagree with the party line on particular issues, thus opening up room for logrolling in the party room, but as long as such opposition is not acted upon in the legislature, cycling will be avoided.

The Use of Different Voting Systems in the House of Representatives and the Senate

The different voting systems used to elect the two chambers of the Australian Parliament (preferential voting in the House of Representatives and the single transferable vote version of proportional representation in the Senate) also counteract any tendency toward cycling. It does so in two different ways. First, the use of different voting systems typically ensures that governments will not gain control of both chambers simultaneously. Because the chambers have a largely co-equal status, stable policy outcomes are thus more likely for the simple reason that it may be difficult to pass legislation through both houses.

Second, Australia's system of proportional representation encourages increased policy spread in the Senate. It does so, most obviously, by ensuring that minor parties and Independents with distinct policy interests have a much greater chance of gaining representation in the upper than in the lower house (Rae 1967, 98). The history of the chamber bears this out. The Greens, Nuclear Disarmament Party, Democrats and Independents such as Brian Harradine, have all represented distinct policy positions within the Senate (Jaensch and Mathieson 1998, 213-216).[14]

In the context of social choice conclusions outlined previously, it is clear that the use of proportional representation in the Senate and preferential voting in the House of Representatives makes it more likely that the Australian houses of parliament will represent somewhat distinct interests. In turn, this means that

[13] Of course, Members or Senators with an independent following or in their last term might feel less pressure to maintain the party line.

[14] Not all minors behave in this way. The Democratic Labor Party held the balance of power during the 1960s and early 1970s, without impacting on the policy spread in the Senate (Jaensch and Mathieson 1998, 213; Uhr 1999,108-109).

preference cycles are less likely. Whether the use of different voting systems to elect the chambers and the presence of disciplined parties are sufficient to guarantee stability in all practical cases is ultimately an empirical question that cannot be dealt with here. Despite this, however, the preceding discussion does suggest an important conclusion. That is, the discussion suggests that policy instability may be less of a concern for Australian political science than has been argued by some social choice theorists occupied either with the issue at an abstract level or with the American Congress, where logrolling appears to be more common (Mueller [1989] 1993, 82). Instead, because of the presence of stability-inducing institutions, like disciplined parties and the different electoral systems used to select parliamentarians in the House of Representatives and Senate, it is viable to proceed with rational choice accounts of the Australian Parliament without further discussion of the prospect of policy instability.

4.7 What Does the Theory Mean for the Study of the Australian Parliament?

Downs' model of electoral competition does look like a good approximation of the situation in the House of Representatives. For one thing, the use of compulsory preferential voting within single member electorates almost always ensures that government will be formed by one of the two major parties (ALP and the Liberal/National Coalition) and that the other major party will gain the status of major opposition party (Aitkin, Jinks and Warhurst 1989, 167; Rydon 1986, 194; Stock [1997] 2000, 220). In other words, as in Downs' model, the race in the House of Representatives is a two-party race.

The division of the Australian electorate into 150 seats clearly adds another level of complexity that is not specified in Downs' model, but on its own, does not make much difference to the prediction that parties will co-locate at a centrist policy position. In fact, there are two points to make about the division of the electorate into discrete seats. First, the median policy of particular seats may differ from the median of the community as a whole. As a consequence, it may be optimal for candidates competing for particular seats to adopt policy positions that are different from those adopted by the party. Second, parties competing for

government have an incentive to adopt the policies preferred by the median voter of the median electorate, rather than the median voter of the community as a whole. This will partially offset the tendency, mentioned earlier, for candidates to situate themselves at the median of the party membership, so as to gain pre-selection. In the absence of systematic gerrymandering, however, the law of large numbers suggests that the divergence between the policy preferred by the median of the median electorate[15] and that in the polity as a whole will not be too large in general. So, while the division of the House of Representatives into seats, in and of itself, can be expected to have some effect on whether the policy preferred by the median voter is secured, this fact alone does not influence the claim that the median voter model represents a reasonable approximation to the electoral circumstances in the House of Representatives.

As such, whether we should expect that the major parties in the House of Representatives will converge or diverge from the centre of the issue dimension depends on whether we believe that factors like the threat of entry, pre-selection contests and voter alienation will have a significant impact on Australian parties. While compulsory voting and high voter turnout at elections means that Australian parties will be less concerned about voter alienation, the other factors are more likely to play some role in the policy considerations of the Australian majors. For these reasons, the following analysis models the policy outcomes that we might expect from Australian bicameralism both when the majors converge and diverge from the centre of the issue spectrum.

4.8 Representing the Senate Electoral Race

Other things being equal, the pull of centrist policy positions seems strong in the House of Representatives. The relevant question here is whether this pull is as strong in the Senate, with its use of the single transferable vote version of proportional representation. The following discussion provides reason to support the proposition that, in fact, proportional representation creates incentives for

[15] The idea behind the concept of the median voter of the median electorate is that electorates can also be ranked on a single policy scale.

parties to spread across the preference distribution, rather than converge at the median (Huber and Powell 1994, 299).

Before discussing this proposition any further, however, note that it is a general proclivity, not a rule. As such, there are examples of chambers elected using proportional representation that have been dominated by two parties - e.g. the lower house of the Tasmanian legislature until the 1980s (Hughes 2000, 159) and the unicameral Maltese parliament (Lijphart 1999, 318). Equally, there are examples of multiparty systems elected by majoritarian voting rules. These examples by no means disprove the proposition, but they do highlight the importance of both institutional rules *and* political culture in determining political outcomes (Costar [1997] 2000, 225-226).

Keeping this caveat in mind, it is still clear that proportional representation encourages the entry of parties with diverse policy concerns. Proportional representation does so because it creates multiple winners within a single seat. For instance, each of the six seats in normal Senate half-elections is won on the basis of around 14.3% support across the state, rather than 50% support required to win a House of Representatives seat. Given this, there is a strong incentive for small parties to enter the Senate electoral race and to attempt to secure a seat. In doing so, it is also clearly advantageous for candidates to spread across the issue spectrum, rather than converge at the median. If candidates do converge at the median, then new entrants can readily capture seats by situating themselves at a policy that secures 14.3% of the vote. Unlike the situation in the lower house, however, there is nothing the major parties can do in terms of policy positioning to prevent the entry of new parties. Instead, both established and new parties maximise their chances of election by adopting policies at 1/(1+n) intervals, where n = number of seats. If preferences are uniformly distributed across the issue, then we should expect to see both that parties are evenly spread across the issue dimension and that no party will gain more than a single seat.

The uniform distribution case clearly does not reflect Australian political reality. Instead, the major parties do, between them, typically capture the majority of Senate seats, reflecting perhaps, a large bulge of support at the centre of the

preference distribution. Even under this preference distribution, however, smaller parties have a strong incentive to adopt extreme policy views to gain Senate representation.

The direct consequence of proportional representation is that the make-up of the Senate is different from Downs' model in two important ways. First, because the threshold required to secure representation is lower under proportional representation than under preferential voting in single member districts, the situation in the Senate is distinctively multi-party, rather than two-party (Lijphart 1999, 317). This is a common feature of proportional representation systems (Papadakis and Bean 1995, 99; Rae 1967, 98). Second, because proportional representation reduces the likelihood that the governing party will have a majority of Senate seats, minor parties in the Senate often occupy a role that is significantly more substantial than is suggested by their size (Lucy 1993, 95). This conclusion is supported by the observation that the governing party has held a majority of Senate seats for only 12 of the 52 years since proportional representation was introduced in the Senate in 1949 (Russell 2001, 36).

Modelling Party Positions in the Senate

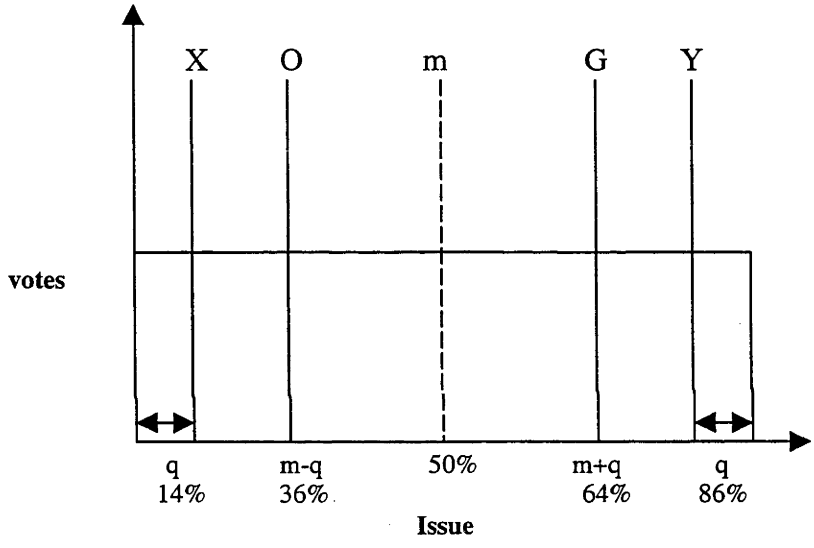
The preceding discussion suggests that there are significant institutional factors in the Senate that encourage minor parties to enter the Senate electoral race. Where and how many minor parties will succeed depends, in this model, on the policy positions of the major parties. In turn, the policy positions of the majors depend on a range of factors, some of which have been raised in section 4.6. Broadly speaking, however, section 4.6 identified two scenarios. These are:

1. the median voter theorem holds and the major parties adopt similar centrist policy positions;
2. the median voter theorem does not hold and the major parties diverge from the median's preferred policy position.

The remainder of this section examines the policy positions that we might expect from minor Senate parties in both of these scenarios, starting with the case where

the median voter theorem holds and the majors adopt similar centrist policies, as represented in figure 4.7. As in earlier figures, this one represents the positions of the government (G), opposition (O), minor parties (X and Y) over a uniform policy distribution. The quota required to secure a seat in the Senate is 'q' and the median voter is 'm'.

Figure 4.7: Party Positions in the Senate when the Major Parties Adopt Similar Centrist Policies



The logic behind the placement of the major and minor parties in each of these diagrams is straightforward. These diagrams model the contest for Senate seats as if it occurs in a single electorate over a single-issue dimension. This is incorrect, but nothing is lost, in terms of potential coalitions, by making the assumption. Instead, the single seat assumption makes clear the possibilities of coalitions between parties that are based on policy concerns. Other coalitions, including those based on state lines, are not highlighted in this model, but this is no loss because state-based coalitions are, despite the formal structure of the Senate, unusual (Galligan 1995, 63).

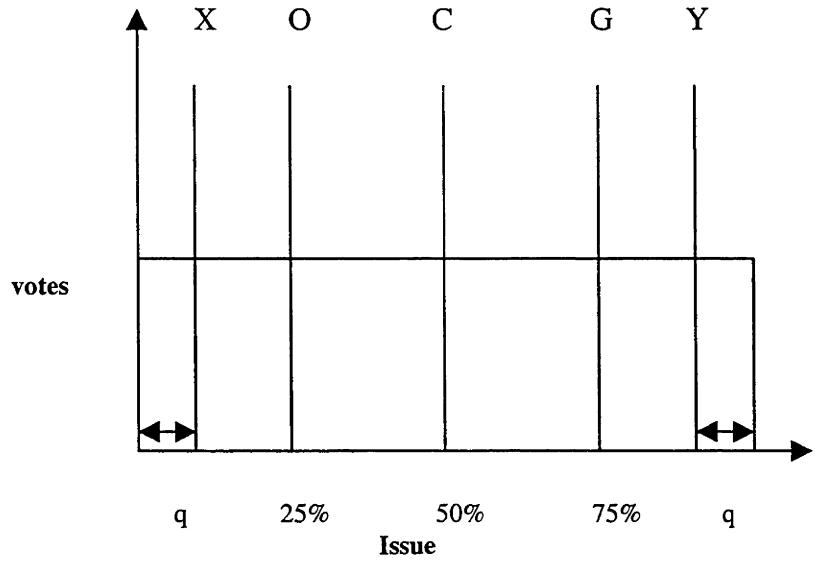
The analysis here assumes that there are two major parties in the Senate, O and G, whose policy platforms are determined in the House of Representatives race. Without loss of generality, also assume that G occupies a policy stance on the

right of the issue spectrum and that O occupies a policy stance on the left of the issue. With these assumptions, it is straightforward to establish what is meant by the phrase 'the majors adopt similar policy positions'. Quite simply, it means that there is not enough policy space *between* the major parties for another party to enter the race and to secure the quota (q) necessary to gain a seat. On this basis, O can shift to the right of the ideal point of the (m-q)th voter and G can shift just to the left of the (m+q)th voter, without creating scope for a centrist minor party. If the quota is slightly more than 14%, as in Australian half-Senate elections, then O can shift no further to the left than the policy preferred by the voter 36% of the way through the issue and G can shift no further than the policy preferred by the voter 64% of the way through the issue. When the major parties are located in this way, a new entrant locating at the median (50%) will gain the support of voters who are closer to m than to (m+q) (7%) and voters who are closer to m than (m-q) (7%). This is not gain sufficient votes to secure a Senate seat.

In this setting (i.e. major parties occupy 'similar' policy positions), minor parties can enter with extreme policies, like policies X and Y, where each of these policy positions is sufficient to capture a single seat. It is tempting to think that the minor parties might try to secure more than one seat by locating in the neighbourhood of O and G on the further side of *m,* since this would maximise the number of seats gained ceteris paribus. To do so, however, would be to open the minors to the threat of entry by another small party. The only way that a minor party can protect against that threat is by locating at X (or Y), where the support between the endpoint and these policy positions is sufficient to secure at least one seat, but insufficient to attract the interest of other small parties. To locate closer to O or G than this is to risk losing all seats.

Now, consider the case where the median voter theorem does not hold, as in figure 4.8. Here the majors diverge to the policy preferred by voters 1/4 and 3/4 of the way through the preference distribution. In doing so, they can meet pre-selection concerns, discourage entry by new major parties in the House of Representatives and so on.

Figure 4.8: Party Positions in the Senate when the Major Parties Diverge From the Centre



When the major parties occupy policy positions that are further apart, we should again expect to see minor parties locating at X and Y in the Senate. As in the previous example, minor parties can guarantee themselves a seat each by adopting these policy positions. In this case, however, because the major parties lie outside the range of (m-q, m+q), there is also scope for the entry of a centrist minor party (C) in the Senate, that adopts the policy preferred by the median voter. That is, party divergence from the centre in the House of Representatives, motivated perhaps by the desire to prevent the success of new entrants there, opens up policy room for a new centrist Senate party.

This completes the analysis of party positioning within the House of Representatives and Senate. In summary, the section highlights two scenarios. In the first, the major parties co-locate at a central policy in both the House of Representatives and the Senate. In doing so, they effectively crowd out the centrist policy space in both chambers and ensure that the only other parties likely to succeed in the Senate are minor extremist parties. In the second scenario, the major parties diverge from the centre of the issue spectrum in the House of Representatives and Senate, thus creating room for centrist minor parties and

extremist minor parties in the Senate. The next section examines the types of policy negotiations that we should expect under both of these scenarios.

4.9 Policy Negotiation in the Australian Parliament

Before turning to the types of policy outcomes that might result from different majority coalitions in the Senate, it is important to say something about the factors that influence the relative bargaining strength of the two chambers in the Australian Parliament. This section examines the impact of four different aspects of the Australian Parliament on the relative bargaining power of the House of Representatives and Senate. These are: constitutional limitations; responsible government; the breakdown of seats and; the double dissolution provision.

The Australian Constitution states that the House of Representatives and the Senate have identical powers to initiate and amend all bills, *other than* bills for the appropriation of money or the imposition of taxation. These limitations on Senate power might be taken to indicate that the lower chamber is substantially more powerful than the upper house. This is not an accurate assessment. The Constitution makes two further provisions that help support the Senate's largely co-equal status. First, despite the fact that the Senate cannot initiate or amend money and taxation bills, s. 53 of the Constitution grants the Senate the right to *reject* all unsatisfactory legislation, whether money bills or otherwise. Second, while the Senate cannot *amend* money bills, the upper chamber retains the right to 'request' that the House of Representatives amend these bills, as long as this request does not increase the level of appropriation or taxation (s. 53). More importantly, the Senate can maintain this request until the House of Representatives makes the requisite amendments or proceeds with the constitutional provisions relating to the resolution of parliamentary deadlocks (The Senate/Department of the Senate 1987, 73; Saunders 1997, 60-62). In effect, the Senate retains a right to reject or amend (although not in these terms) any bill, including money bills. It is the Senate's effective veto threat on all bills that gives the upper chamber its negotiating power with the House of Representatives (Russell 2001, 32; Sharman 1998). As such, in spite of initial appearances, the Constitution does *not* significantly limit the power of the Senate.

While the Constitution gives the chambers equal bargaining power, responsible government weights the balance of power strongly in the favour of the lower house. In fact, the House of Representatives gains both moral and practical power because the executive is formed by the party with control over the House of Representatives. The lower chamber's practical power arises because other parties cannot hope to pass bills or amendments without government support in the lower house. In this way, government preferences must be the starting point for any policy negotiations. At the same time, responsible government also grants a certain moral authority to the government in its negotiations with the Senate, as witnessed in debates over the question of mandates. While the concept of mandate is often disputed, particularly by minor parties who claim their own counter-mandate, the concept nonetheless carries some rhetorical weight (Horne 1996; Goot 1999, 2000a; Mulgan 2000).

The third factor that bears on the relative bargaining power of the chambers is the breakdown of seats. Clearly, the number of Senate seats held by the parties, and more specifically, whether or not a party 'holds the balance of power' is crucial in determining the nature of likely bargains. This point is illustrated by the changing fortunes of the Democrats before and after the 1998 election. Prior to the election, the make-up of seats in the Senate was: Liberal-National 37, ALP 28, Democrat 7, Greens 2, Independent Harradine 1, Independent (ex-ALP) Colston 1. Given this make-up, the governing Liberal-National Coalition was two seats short of the absolute majority required to control the chamber. The fact that the Liberal/National government could choose to form a minimal majority coalition with the Democrats, Greens, Senators Harradine and Colston and the ALP, meant that the minor parties and Independent Senators all had to compete with each other in order to secure a policy-making role. This enhanced the government's negotiating power - lacking support from the ALP, Democrats or Greens on one issue, the government could readily redirect its focus to the Independents (Jaensch and Mathieson 1998, 214). The situation altered dramatically after the 1998 election, when the change in Senate seats ensured that the government had no

alternative but to bargain with either the Opposition or the Democrats to pass its legislation.[16]

Another factor that impacts on the bargaining strength of the chambers is the mechanism for resolving disputes between the chambers - the double dissolution provision. On the government's side, only bills that are initiated in and supported by the House of Representatives can set up a double dissolution trigger. In addition, according to convention, the Governor General acts on the advice of the government in calling a double dissolution election (Saunders 1997, 65). Most importantly, s.57 states that, after a double dissolution the government may call a joint sitting of the whole parliament to vote on the passage of the disputed bills stockpiled prior to the election. If the same governing party or coalition retains control of the House of Representatives, then the government is likely to succeed in passing these bills through the joint sitting because the House of Representatives is twice the size of the Senate.

Offsetting this lower house strength, however, is the reality that no party, including the governing party, can be assured of re-election following a double dissolution. This point is emphasised by an examination of the six double dissolutions that have been held in Australia since 1901. Since then, only three of the six have resulted in the re-election of the government. This is not very good odds, since presumably in all cases except 1975 when the constitutional crisis resulted in the dismissal of the Whitlam government and a double dissolution election under the newly-installed Fraser government, the governing party chose to go to a double dissolution under the belief that it would retain government. As such, choosing to go to a double dissolution is a risky strategy for the government.

The risks for independents and minor parties from being forced to go to an early election are also unclear. The quota required to gain a Senate seat is reduced at a double dissolution election from 14.3% to 7.7%, so re-election may be easier for minor parties at a double dissolution election (Bean 1997, 73). At the same time, minor parties face three significant risks. One risk is the possibility that the public

[16] The sometimes perverse relationship between numbers of seats and political power is explored in a large literature. See Dowding (1996), Holler (ed. 1982) for introductions to the debates.

might blame the minor parties for parliamentary instability. If this happens and the backlash is severe, then it might be sufficient to threaten minor party seats even under a lower quota. Another risk for minor parties is the possibility that a government more hostile to the aims of the minor party will gain power, thus making any mutually beneficial bargains with the government impossible. The third risk faces minor parties who hold the 'balance of power', where this means that the government must secure the support of that minor party to pass its legislation if the major opposition party votes against the legislation. If the minor party is initially in this situation, then they might rationally forgo the chance to secure additional seats, so as to maintain significant negotiating strength.

Each of these factors impacts on the power differential between the chambers differently. The Constitution, double dissolution procedure and breakdown of seats leave the chambers of the parliament with roughly equal power, while responsible government and the practical and moral power accompanying it serve to increase the power of the House of Representatives. As such, we might conclude that the House of Representatives holds the upper hand in negotiations with the Senate, but that the upper hand is held more by convention and popular expectations than by formal constitutional rules.

The power differential between the House of Representatives and the Senate is important to the current inquiry insofar as a government formed by a party/coalition with control of the House of Representatives will be more likely to secure for itself favourable policy outcomes if the factors mentioned above are weighted in favour of the House of Representatives. The ensuing analysis refers again to the question of the power differential between the chambers below. For now, consider the likely majority coalitions that we might expect in the Senate if the government is to pass its legislation through both chambers. One of four possible situations might prevail, depending on the breakdown of seats.[17]

[17] The following discussion finesses the distinction between the number of votes needed to pass legislation (an absolute majority of 39 votes) and the number needed to block legislation (38).

These are:

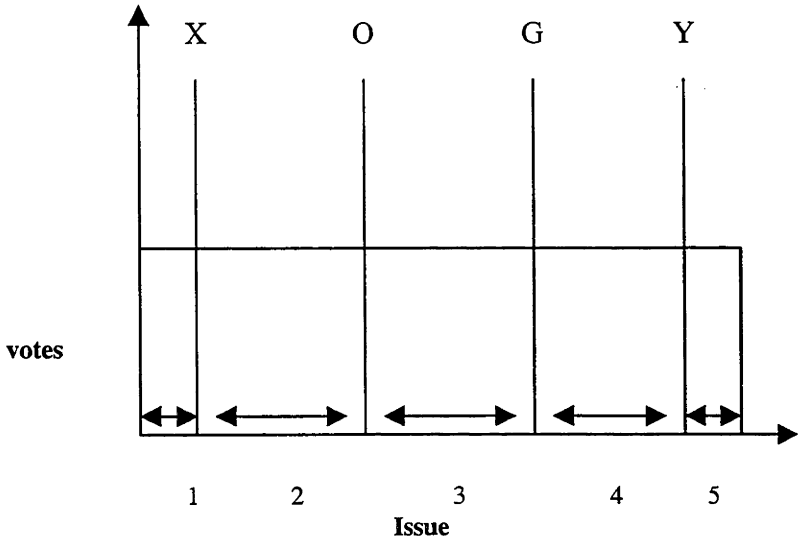
1. the government has sufficient seats in the Senate to pass legislation through both chambers on its own.
2. the government must gain the support of the major opposition party (O) to pass its legislation through the Senate. (This occurs when the major opposition party has an absolute majority of Senate seats.)
3. the government can form a majority coalition with either the major opposition party or a minor extremist party (Y) to pass its legislation through the Senate.
4. the government can form a majority coalition with either the major opposition party or a minor centrist party (C) to pass its legislation through the Senate.

Since 1980, and the rise of the Senate as a strong policy actor, no Australian government has found itself in either situation 1 or 2. For this reason, the following examination puts these possible majority coalitions to one side and catalogues instead the likely policy outcomes under scenarios 3 and 4. The section finishes by returning to the question of the power differential within the parliament.

What Happens if the Government forms a Majority Coalition with the Major Opposition Party in the Senate?

In both of the cases discussed here (3 and 4), the government can pass its legislation through the Senate with support from the major opposition party. If the opposition agrees to support government legislation through the Senate, then the final policy agreement will depend on the factors already outlined. In addition, policy agreement will depend on the place of the status quo. Figure 4.9 attempts to capture the role of the status quo in determining the nature of policy outcomes by representing the policy positions of parties over a single-issue dimension, where the numbers 1 to 5 indicate different policy ranges.

Figure 4.9: Majority Coalitions Between the Government and Major Opposition Party in the Senate



In determining whether parties will agree to support legislation through the Senate, two assumptions seem relatively straightforward. First, assume that no party will agree to any policy change that results in the implementation of policy that is further from the party's ideal policy than the current status quo. For this reason, the status quo is always the fallback position in negotiations within the parliament. Second, if parties do reach agreement, then assume that the final agreement will fall somewhere between their ideal policies. The exact position of the negotiated policy cannot be determined in abstract, but we can say that it depends on the factors outlined previously.

Looking more closely at figure 4.9, it is clear that if the status quo falls in region 1 or region 5, then it is likely that agreement between the opposition (O) and government (G) will be reached. This is because, in both cases, the parties in the potential coalition have policy preferences that are relatively similar to each other and different from the status quo. As such, O and G will have no policy-based difficulty in reaching agreement to move away from the status quo and into region 3 (the region between the government and opposition's favoured policies). While we can have some confidence that these parties will agree to adopt a policy in

region 3, we cannot be sure on the exact position of the final agreement. Instead, whether the final agreement point is close to G or to O will depend on the bargaining power of the parties.

Agreement is also likely if the status quo initially falls in regions 2 and 4. There is something noteworthy about these policy regions. That is, if the status quo falls in region 2, then the bargaining strength of the opposition is enlarged because the status quo policy is already a good fallback position for O. The reverse is true if the status quo falls in region 4. Here the government's bargaining power with regard to the opposition will be enhanced because policies in this range are already quite satisfactory to G.

The only time that we can be sure of the exact policy outcome is when the status quo lies in the region denoted by 3 in figure 4.9. Potential bargains in this range are zero-sum contests. That is, bargains in this region cannot make both parties better off simultaneously. For this reason, if the status quo lies in this region, then there will be no policy change.

There are two general points to make about majority coalitions between G and O. First, the policy outcomes from these bargains are never less centrist than the status quo. Second, these negotiated agreements are more centrist than the policy outcomes that would result in a single parliamentary chamber controlled by the same governing party/coalition. Together, this means that no matter where the status quo initially falls, a majority coalition involving the government and major opposition will shift policy toward the optimal compromise.

While policy coalitions between the government and opposition are apt to draw policy toward the optimal compromise, the likelihood of any of these policy outcomes is far from assured. This is because, in presenting the party as an 'alternative government', the opposition must necessarily distinguish itself in key respects from the government. Supporting government legislation through the Senate clearly does not help this goal.

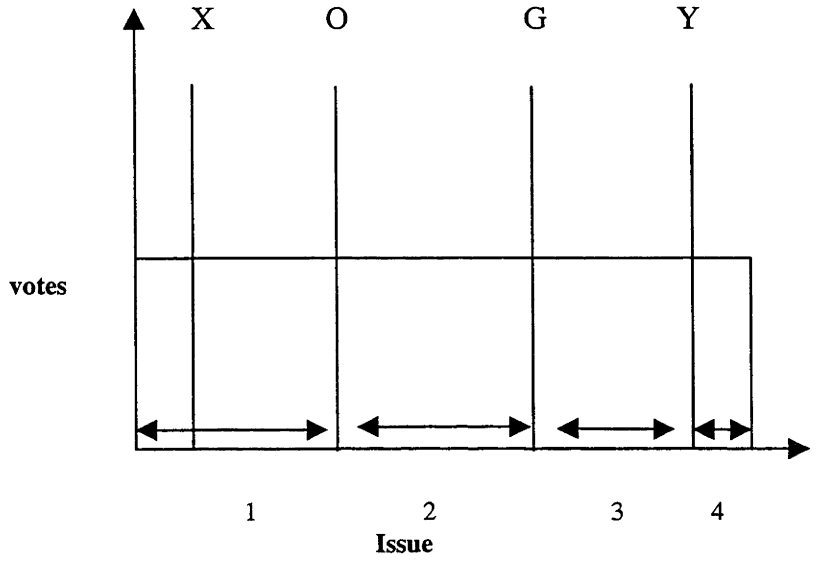
The incentives facing a government that wants to pass its legislation through the Senate, on the other hand, are slightly different. It seems clear that the government may gain both rhetorical value and the passage of its legislation if it can form a coalition with the opposition.[18] It is for this reason that the government may attempt to structure legislation before the parliament in such a way that the opposition cannot refuse to support it without attracting political backlash. These arrangements might be described as implicit, rather than explicit bargains, because they occur even if one of the parties would rather not endorse the legislation. An example of implicit bargaining is found in the recent decision by the ALP to support the government plan to grant all asylum seekers to Australia a three year temporary visa (The Border Protection Bill) because the ALP could not risk the political backlash associated with opposing this bill, even though the ALP reportedly believed the scheme would not work (Martin and Schultz 23/11/1999, *Sydney Morning Herald*). While this type of implicit bargain may be attractive to the government, any bargain between the opposition and the government has severe drawbacks for the opposition. For this reason, we should expect that majority coalitions between the government and the main opposition party in the Senate are not always likely, even if the majors share similar ideological aims (Goodin 1996, 331).

While this institutionalised disagreement limits the opportunities for policy negotiations between the major parties, it does open up room for policy making by the minor parties. The role of minor parties and independent Senators may also be enlarged if parties adopt pragmatic bargaining strategies. That is, if minor parties are prepared to trade their support on one issue for policy change in other areas, then their policy influence can be extended past issues on which minor parties have the 'balance of power'. For the moment, note the impact of explicit bargains between the government and an extremist party over a single dimension, as represented in figure 4.10.

[18] While the government might be pleased to secure opposition support on occasion, it must also be cautious not to foster the opinion that the government and opposition have identical policies. See Sharman (1999, 353) for the argument that neither party wants to foster this type of policy bargain.

What Happens if the Government forms a Majority Coalition with an Extremist Minor Party (Y) in the Senate?

Figure 4.10: Majority Coalitions Between the Government and an Extremist Minor Party (Y) in the Senate



As with majority coalitions between the government and major opposition, it is useful when thinking about policy coalitions between G and Y to isolate the impact of the status quo on the final policy bargain. In fact, there are four policy regions that the status quo might fall within in figure 4.10. As with the previous case, if the status quo falls between the preferred policies of the potential bargaining parties (region 3 in figure 4.10), then there will be no change from the status quo. Otherwise, we can expect that policy negotiations will draw policy into region 3. For the reasons made explicit in the previous example, the government will have comparatively greater negotiating power if the status quo falls in region 2, but comparatively less negotiating power the closer the status quo falls to Y's preferred policy in region 4.

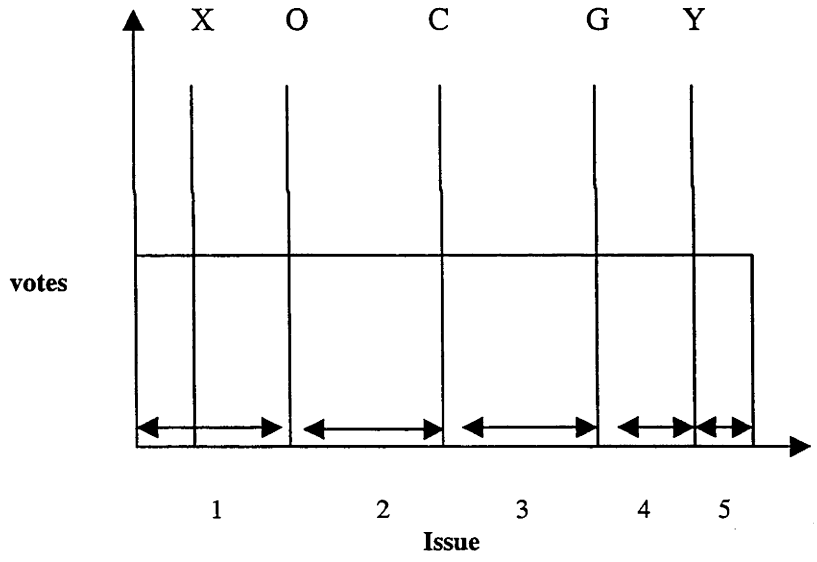
Wherever the status quo falls, all bargains involving the extremist minor party (Y) are more extremist than those we would expect from a unicameral chamber controlled by G. In addition, these policy results are only ever *less* extreme than

the status quo if the status quo falls in region 4. Otherwise, all outcomes are relatively more extreme than the status quo. In the end, this means that policy coalitions between G and Y almost always draw policies away from the optimal compromise.

The last majority coalition discussed here involves the government and a centrist minor party (C).

What Happens if the Government forms a Majority Coalition with a Centrist Minor Party (C)?

Figure 4.11: Majority Coalitions Between the Government and a Centrist Minor Party (C)



Importantly, coalitions between the government and centrist minor party are only possible if the major opposition refuses to the support government legislation and if the major parties diverge from the median (as might be the case if the majors face the threat of entry, voter alienation or pre-selection contests in the House of Representatives).

If these conditions exist, then, as in the previous examples, whether agreement is likely will depend partly on the position of the status quo. Wherever the status

quo falls along the issue spectrum, it is clear that if the government forms a majority coalition with a centrist minor party, then negotiations will deliver outcomes between the preferred policies of C and G (region 3). As in the previous examples, no agreement will arise if the status quo initially lies in region 3, because any change within this region can only benefit one party while harming the other. In addition, the bargaining strength of the centrist minor party increases if the status quo lies in region 2 because policies in this region are already quite good for the centrist party. Similarly, the relative bargaining strength of the government rises if the status quo is in region 4.

In summary, majority coalitions between the government and centrist minor party will always draw policies in a more centrist direction, relative to the policy outcomes that would result from a unicameral chamber controlled by the government. In addition, as with coalitions between G and O, coalitions between G and C never produce policy agreements that are less centrist than the status quo. Overall, this means that majority coalitions of this form are likely to deliver policies that approximate the optimal compromise.

What Happens if there is More than One Potential Majority Coalition?

All of the discussion so far has proceeded as if the government faces only one potential bargaining partner (i.e. O, C or Y). In fact, in each of the cases outlined earlier, the government faces *at least one* potential bargaining partner. The remainder of this section examines the impact of multiple majority coalitions on the parliament's likely policy outcomes.

It is clear that the existence of multiple majority coalitions enhances the government's ability to secure legislation that is closer to its ideal. For instance, if a minor extremist party threatens to draw policy compromises too far away from the centre of the issue dimension, then the government might expect that the major opposition will be forced to re-enter as a potential supporter of government legislation. That is, despite the electoral imperatives discouraging agreement between the major parties, the opposition might support government legislation in some cases if the alternative policy agreement is, from its perspective, sufficiently

bad. In the end, if policy concerns outweigh electoral imperatives, then the ability of non-government parties to negotiate favourable policy outcomes will be significantly reduced.

Summary

This section has isolated three different types of majority coalitions that, depending on seats and policy details, might arise in order to pass legislation through the Senate. These are: majority coalitions between the government and major opposition; majority coalitions between the government and a centrist minor party and; majority coalitions between the government and an extremist minor party. We can expect, if either of the first two forms of majority coalition arise, that the policy outcomes produced by Australian bicameralism will be drawn towards the optimal compromise. If, however, coalitions between the government and minor extremist party arise, then the reverse is true - under this scenario, policy outcomes will be drawn away from the optimal compromise. In either case, this section has also shown that a number of factors, including the fact that the government usually has multiple possible bargaining partners, ensure that the negotiating power of the government will be enhanced relative to the opposition parties.

4.10 Does the Process of Policy Negotiation in the Parliament Lead to More Centrist Policy Outcomes in Australia?

There are two general conclusions to be drawn from the preceding analysis. First, if the major parties occupy similar centrist policies in the parliament, then we can expect that policy negotiation between the government and opposition parties in the Senate will sometimes lead to more centrist policy outcomes. This happens when the government and major opposition form a majority coalition. Despite similar policy stances, however, these majority coalitions may be hampered by the need for the opposition to present itself as an alternative government. If the major opposition is unwilling to negotiate with the government, then the government

may be forced to negotiate with a minor extremist party so as to pass its legislation. If this majority coalition arises, then the resulting policy is likely to be more extreme.

This result follows from the set-up of the model developed here. If the government and major opposition promote centrist policies and, as a consequence, there is no centrist minor party, then a unicameral parliament controlled by a single party or tight coalition will best ensure the implementation of policies that approximate the optimal compromise. Any other legislative structure, such as bicameralism, is likely to thwart the government's ability to implement the optimal compromise.

The case is different when the major parties diverge from the centre of the policy distribution. While it is still possible in this scenario that the government might form majority coalitions with extremist parties that draw policies away from the centre, any agreements involving the centrist minor party will necessarily draw policy toward the centre of the issue dimension. As such, if the major parties have distinct policy positions, then we can expect that Australia's bicameralism will more often deliver policy outcomes that are closer to the optimal compromise than those we could expect from a single legislative chamber controlled by the same governing party.

These results show the fallacy of comments like the following: "[t]wo Houses that must assume, in order to function, similar majorities [as in Australia], stand out as a macroscopic instance of ill-conceived constitutionalism" (Sartori [1994] 1997, 187). Sartori's comment ignores the likelihood that the governing party will find a range of potential bargaining parties in the Senate that are willing to engage in policy compromises. In fact, Australian parliamentary practice shows that policy negotiations between different governing and opposition parties are commonplace. For example, Elliot (1997) summarises the ability of the 1993-1996 Keating Labor Government to pass legislation through the Senate when it lacked a Senate majority in the following manner: "...government without the numbers, for all the media hype of delay and obfuscation, has, in fact, been remarkably successful"(1997, 45).

Other empirical commentary also provides evidence to support the argument advanced here. For instance, the detailed studies of the passage of the 1981 and 1993 budget bills and the 1996 Workplace Relations Bill, mentioned earlier, provide support for two suggestions made here. First, these studies support the implicit assumption that we can expect that policy coalitions will not be frozen, but will shift according to the nature of the issue at hand (Sugita 1997, 169). Second, these studies support the explicit argument also made by Elliot that minor parties will engage in productive policy making. That is, work by Young (1997), Sugita (1997) and Uhr (1999, 111) suggests that the rise of the minor parties in the Senate has not been, despite vocal criticisms, characterised by obstructionism. Instead, they argue that the presence of the Democrats as a minor centrist party in the Senate both enhances parliamentary scrutiny (Uhr 1999, 169) and delivers more widely supported policy outcomes (Sugita 1997, 168). Together, the theoretical argument advanced here and these empirical analyses make a strong argument against Sartori's conclusions on the 'ill-conceived' nature of Australian bicameralism.

Suggestions for Further Work

While suggestive, there are at least three reasons why existing empirical work is not sufficient to determine whether Australian bicameralism is likely overall to orient policies towards the optimal compromise. First, as mentioned previously, the Australian literature sacrifices breadth for detail. If we are to reach conclusions about Australian bicameralism as a whole, it is necessary to stand back from this detail. At the same time, while existing international research, like Huber and Powell (1994) and Lijphart (1999), attempts to assess the effects of electoral systems at a cross-country level, this work is limited because it does not fully account for the Senate's role as a policy actor in its own right. Instead, the Australian Parliament is categorised, along with the United Kingdom's Parliament, as being dominated by the government (Huber 2000, 34). This seems reasonable as a description of the House of Representatives. Given the account developed here, however, this picture misrepresents the circumstances in the Senate. More importantly, given the formal powers of the Senate in the

Australian Parliament, this picture misrepresents the nature of the Australian Parliament as a whole.

For these reasons, there is still a need for empirically-focused work to determine at a general level whether the assessment of Australian bicameralism advanced here is fully borne out by empirical experience.

4.11 Conclusion: What Can Rational Choice Theory Add to the Study of the Australian Parliament?

This chapter started with an argument in favour of the median, and other centrist policies, as 'optimal compromises' between the competing interests of citizens. The most important argument advanced in favour of centrist results is that they typically minimise the costs associated with group decisions. With this argument established, the chapter then asked whether Australian bicameralism is likely to deliver policies that approximate the optimal compromise. In answering this question, the analysis argues that if the median voter theorem holds, and the major parties in the Australian Parliament converge at the median voter's preferred policy, then the House of Representatives alone is more likely to secure the optimal compromise than if it is forced to engage in policy negotiations with the Senate. That is, when the major parties adopt similar centrist parties, we should expect that most bargains with Senate parties will draw policies away from the centre of the issue dimension.

The assessment of Australian bicameralism is different, however, if factors such as voter alienation, the threat of entry and pre-selection play a role. All of these elements may cause the major parties in the House of Representatives and Senate to diverge from the centre of the issue dimension. With major party divergence, we can expect the entry of a centrist minor party in the Senate and, if this party engages in policy negotiations with the government, then we can predict that policies will tend to be drawn toward the optimal compromise. This is not to say that bicameralism will always deliver optimal compromises. After all, if coalitions between the government and minor extremist party emerge, then more

extremist policies will result. Nonetheless, when the major parties diverge, we know that the House of Representatives acting alone will fail to deliver the optimal compromise. We also know that, together, the House and the Senate have a much greater chance of securing it.

More generally, this chapter suggests that rational choice theory makes two different contributions to the study of the Australian Parliament. First, in advancing an argument in favour of centrist, rather than extremist policies, the approach develops a novel argument regarding the best way to assess policy outcomes. This measure is useful because it is general and hence is not biased in favour of specific policies. Second, in contrast to existing accounts of policy negotiation in the Australian Parliament, the approach provides a model for studying policy interaction between parties in the parliament at a general conceptual level. In doing so, the chapter steps back from the detail of particular parliamentary debates and draws attention to general tendencies consistent with the institutional logic of Australian bicameralism.

Appendix: Algebraic Proofs

The first proof shows that the median minimises total losses when loss functions are linear and identical.

Let c_i = cost function for voter i

x = level supplied

P*i* = individual i's ideal point

TC = total cost for all voters

2m + 1 = number of voters

Constant cost functions take the following form :

$c_i = |x - P_i|$

$$TC = \sum_{i=1}^{2m+1} |x - P_i|$$

$$\frac{\partial TC}{\partial x} = \sum_{i=1}^{2m+1} \frac{\partial}{\partial x} |x - P_i|$$

$$\frac{\partial}{\partial x} |x - P_i| = \begin{cases} 1, x > P_i \\ -1, x < P_i \end{cases}$$

To find the point at which total costs are

minimised, solve $\left. \frac{\partial TC}{\partial x} \right|_{x = x^*} = 0.$

This occurs when x^* = median.

At the median, there are m voters with P*i* < x^*

and m voters with P*i* > x^*.

Substituting from line 4, we get

$$\frac{\partial TC}{\partial x} = m \times 1 + m \times -1 = 0.$$

Therefore, the median mimises total costs.

The second proof shows that the mean minimises total losses when demand is linear and downward sloping.

Let c_i = cost function for individual i

x = level supplied

Pi = individual i's ideal point

2m + 1 = number of voters

When demand curves are linear and downward sloping,

individual cost curves take the following form :

$$c_i = (x - Pi)^2$$

$$TC = \sum_{i=1}^{2m+1} (x - Pi)^2$$

$$\frac{\partial TC}{\partial x} = \sum_{i=1}^{2m+1} \frac{\partial}{\partial x}(x - P_i)^2$$

$$= \sum_{i=!}^{2m+1} 2(x - P_i)$$

To find the point at which total costs are minimised, solve $\frac{\partial TC}{\partial x} = 0$

$$\sum_{i=1}^{2m+1} 2(x^* - Pi) = 0$$

$$\sum_{i=1}^{2m+1} x^* - Pi = 0$$

$$(2m+1)x^* - \sum_{i=1}^{2m+1} Pi = 0$$

$$x^* = \frac{\sum_{i=1}^{2m+1} Pi}{2m+1}$$

In words, x^*equals the sum of all ideal values divided by the total number voters This is the mean.

5 THE 1999 REPUBLIC REFERENDUM: IS THERE A CYCLE?

5.1 Introduction

The facts surrounding the 1999 republic referendum are well known. In all states and territories, apart from the ACT, majorities of electors voted against the proposition that the Constitution should be altered 'to establish the Commonwealth of Australia as a republic with the Queen and the Governor-General being replaced by a president appointed by a two-thirds majority of the members of the Commonwealth Parliament'.[1] Overall, 55% of Australians voted 'No' and 45% voted 'Yes'. There have been many debates over the meaning of this result. Whereas supporters of the 'No' vote interpret the outcome as a sign of overwhelming support for the status quo, supporters of a directly elected president argue that the status quo won only because it was set against the wrong republican model. They maintain that the status quo (S) would fail in a referendum contest against the directly elected presidential model (D), a claim that is supported by a series of opinion polls.[2] On the other hand, the Constitutional Convention, held prior to the referendum, determined that the president appointed by two-thirds of parliament model (P) is preferred to the direct election model. If the Constitutional Convention's decision is regarded as 'representative' of the electorate's opinions then, together, these judgements on the republic issue set up a conundrum.

The conundrum is that the status quo (constitutional monarchy) is preferred to the president appointed by two-thirds of parliament model, the president appointed by two-thirds of parliament model is preferred to the directly elected presidential model and the directly elected presidential model is preferred to the status quo. This state of affairs might be interpreted as showing that the decisions made at the

[1] See the Australian Electoral Commission website for further details: http://www.aec.gov.au/referend/report-stats99/contents.htm.
[2] See Morgan Poll 1999b, Newspoll 8/2/1998, Newspoll 12/9/1999.

Constitutional Convention were unrepresentative of the electorate's views or that voters at the referendum were uninformed about the real benefits of alternative models. A third possible interpretation, and one that is suggested by extensive social choice theory, is that this conundrum reflects the existence of a preference cycle over the three constitutional models that dominated the debate preceding the referendum.

This chapter investigates this third possibility. The question is important because social decisions made in the presence of preference cycles reflect the order of the vote, rather than clear group preferences for the final outcome. As such, if a preference cycle over the republic issue exists, then the failure of the president appointed by two-thirds of parliament model reflects the structure of the decision-making process, not any underlying group preference in favour of the status quo. If there is a cycle of the form P>D>S>P, as suggested above, then we might just as easily have seen the parliament appointed model (P) *beat* the status quo (S). This outcome might have eventuated if direct election (D) had been first placed in a majority rule contest against the status quo and the winner of that election set against the president appointed by two-thirds of parliament model. Under this voting procedure, the parliament appointed model would have been successful. The presence of cycles also clearly raises questions about agenda manipulation, discussed in chapter 1. In short, if group preferences are characterised by preference cycles, then an actor with control over the order in which the vote is structured can, in theory, manipulate the order of the vote so as to ensure the success of any policy outcome (McKelvey 1976, 472).

The structure of the chapter is as follows: section 5.2 briefly reviews the Australian literature on the republic referendum and the empirical and theoretical literature dealing with preference cycles. In doing so, the section shows that there is some, albeit limited, overlap between social choice discussions of cycles and Australian political science. Section 5.3 shifts attention away from existing literature to focus on the specifics of the republic debate. The section uses data

from the Australian Constitutional Referendum Survey[3] to ask and answer the following empirical questions:

1. Is there a cycle over the referendum issue?

2. What is the structure of voter preferences over the republic issue?

The section shows that, as it happens, there is no cycle on the republic issue. Instead, the direct election option is preferred by a majority of respondents. It is clear from this investigation, however, that preferences over the republic issue share a common noteworthy characteristic. That is, voter preferences over the republic issue are, by and large, single-peaked along the (P,D,S) dimension. Section 5.4 explains the meaning of this term. Section 5.5 speculates on three different implications that follow from this conclusion, including the supposition that the referendum's failure may be partly explained by the contradictory views held by the 'Yes' campaigners and the wider public on the structure of the republic issue. The chapter ends with the argument that rational choice theory provides a useful framework for understanding how seemingly unrelated questions relating to the republic referendum, and their answers, fit together.

5.2 Background

This chapter deals with literature from two distinct, but overlapping, fields of research - social choice theory and Australian political science. As discussed in chapters 1 and 4, much work within the former is concerned with the conditions required for preference cycles. In fact, one of the earliest and most famous findings in this field highlighted the existence of a preference paradox (Black 1958, 46; McLean and Hewitt 1994, 40). Late in the eighteenth century, Condorcet showed that even though all individuals in a group might have transitive preferences over a series of alternatives, the aggregation of these preferences via majority rule might nonetheless produce intransitive, or cyclical, group preferences (Mueller [1989] 1993, 63-64; Ordeshook 1986, 56-59).

[3] The 1999 Australian Constitutional Referendum Study data are available from the Social Science Data Archive at the Australian National University at http://ssda.anu.edu.au. Those who carried out the original analysis and collection of the data bear no responsibility for the analysis in this chapter.

Building on this result, Arrow ([1951] 1963) showed that there is no way, in general, to aggregate individual preferences into a single ranking that satisfies five seemingly minimal conditions (outlined in chapter 1). Although Arrow's theorem says nothing about the frequency or severity of cycles, it does show that Condorcet's paradox is not a product of any particular voting method. Instead, cycles result from the make-up of preferences and, as such, are possible in any fair voting procedure (Riker 1982a, 9; Riker 1996, 130). Moreover, an extensive range of theoretical research shows that the conditions required for stable (i.e. non-cyclic) preferences are very restrictive (Miller, N. 1995, 62; Schofield 1983).

Alongside the theoretical results on the prevalence of cycles and the possibilities for agenda manipulation is a large literature devoted to the identification of empirical examples of cycles. Attention in this field focuses both on decisions by committees and legislatures and on experimental studies of group preferences (Gehrlein 1983, 164-169; Weisberg and Niemi 1972). Despite this widespread attention, however, relatively few cycles have to date been identified (Feld and Grofman 1992; Grofman 1993, 1551-1553).

As is also clear from chapter 1, the reasons suggested for this disjuncture between theory and empirical results are manifold, including the suggestion that institutions, logrolling and agenda manipulation all create stability. Another explanation for stability, and one that is investigated in this chapter, is that individual preferences *themselves* might be structured in a way that limits cycling. This means that there may be factors, not allowed for in the abstract formulation of Arrow's 'unrestricted domain' axiom, that generally shape preferences along similar lines. More specifically, citizens might hold common understandings and perceptions that structure their understandings of debates in particular ways. If this is the case, and individual preferences mostly fall within a restricted domain, then preference cycles are much less likely to eventuate (Niemi and Wright 1987).

The approach taken by Australian political science to the study of the republic referendum is distinctly different to the social choice literature on voting outlined

above. As is clear from chapter 4, there are no general discussions of policy cycling in Australian debates over the Commonwealth Parliament. The same is true of literature on the republic referendum. Instead, explanations of the result commonly stress at least four factors.[4] First, it is noted that it is difficult to achieve *any* constitutional change in Australia. This is both because the Constitution requires that a majority of electors overall and a majority of electors in a majority of states support any change at a referendum and because Australians are historically unlikely to support constitutional change (Irving 2000, 113; McAllister 2000, 15).

Second, it is historically difficult to pass any referendum in the face of less than unified support from the main political parties (Higley and Evans Case 2000, 138; Pyne 1999, 35; Turnbull 1999, 245). For Turnbull, the Prime Minister's opposition to the proposed republican model accounts for a large part of its loss. In Turnbull's words: "Had ...[the Prime Minister] supported a republic, it would have been a walkover. It was his choice to oppose a republic that made a loss almost inevitable" (1999, 228).

Third, and perhaps most interesting, are findings that highlight the attitudinal differences between supporters and opponents of the referendum proposal. On this point, Tranter (2000) and McAllister (2000) argue that attitudes toward particular political leaders, trust in politicians, attitudes toward Britain and political knowledge all play a significant role in explaining the vote. For instance, survey respondents who said they would vote for the Coalition, they liked Kerry Jones, they wanted to retain links with Britain and those with relatively little political knowledge and little trust in politicians were more likely to vote 'No' in the referendum. In contrast, respondents who were ALP supporters, liked Malcolm Turnbull, favoured an Australian Head of State and those with relatively more political knowledge and more trust in politicians were more likely to support the parliament appointed model (and vote 'Yes') at the referendum (McAllister 2000, 15-16; Tranter 2000, 4-6).

[4] Much of the literature also focuses on partisan arguments about the pros and cons of alternative models or on the historical development of Australian republicanism. For a summary of internet resources, see Souter (2000) <http://www.edfac.usyd.edu.au/staff/souters/republic.html>.

Betts adds a different twist to this account when she emphasises the importance of "attitudes to the new cosmopolitan social agenda" (1999, 32) in explaining the referendum outcome. As she sees it, voters who hold new cosmopolitan views, which include positive attitudes towards "...high immigration, multiculturalism, enthusiasm for integrating Australia into Asia, and support for equal-opportunity legislation and minority rights, particularly Aboriginal rights" (Betts 1999; 34), were more likely to vote 'Yes' in the republic referendum than other voters.

The fourth explanation for the referendum defeat similarly draws a distinction between voters with cosmopolitan and non-cosmopolitan views. According to this line of argument, the referendum failed because the push toward a republic in general, and, more especially, the adoption of the parliament appointed model fit within the aspirations of elites, not 'ordinary' Australians (Irving 2000, 112). Without the support of ordinary Australians, the reasoning continues, there is no way that the referendum could pass.

Together, these existing accounts provide a substantial part of the explanation of the referendum result. None of the research mentioned so far, however, investigates the possibility of a preference cycle. In fact, there is limited discussion of cycles in Australian political science. Mackerras suggests that the status quo is a Condorcet winner - an option that would beat both alternatives in pairwise contests (quoted in Devine 25/11/2000; McGuinness 18/11/2000). Mackerras argues that while the direct election model might have majority support at the moment, public opinion will turn against any republican model, including direct election, once the model receives full public scrutiny. It is for this reason, Mackerras argues, that the status quo will beat a direct election model in any future referendum in the same way that the status quo won over the parliament appointed model.

The account developed here aims to improve on Mackerras' efforts in two ways. First, while Mackerras' conclusion may be right, it is based on political judgement, rather than empirical evidence. In contrast, the account developed here makes use of survey data collected at the time of the referendum. Second, this chapter takes findings from social choice theory further than does Mackerras.

After all, if we find that there is no preference cycle, then social choice theory has not added much to the understanding of the referendum result. In fact, this chapter's real contribution is its effort to investigate the structure of voter preferences over the republic issue.

5.3 Is There a Cycle on the Republic Issue?

The following analysis makes use of survey data with an effective sample size of 2311 voters at the time of the referendum by Gow, Bean and McAllister (2000). The relevant questions in the survey ask respondents to number their first and second preferences between the direct election (D), status quo (S) and parliament appointed models (P).[5] Answers to these questions provide the data to construct table 5.1, which lists all possible preference orderings and the numbers of respondents in each person type.[6]

Table 5.1: Person Types

Voter types	**1**	**2**	**3**	**4**	**5**	**6**	**Missing or invalid responses**
First Preference	P	P	S	S	D	D	
Second Preference	D	S	D	P	P	S	
Third Preference	S	D	P	D	S	P	
% Respondents	14% (317)	3% (76)	14% (328)	3% (82)	22% (511)	19% (431)	24% (566)

[5] The survey does not ask respondents to list their third preference. In order to determine whether there is a cycle, however, we need to assume that individuals have complete preference orderings (i.e. they have preferences over the three options on offer). As such, third preferences are imputed from respondent answers to questions about their first and second preferences.

[6] The person types in table 5.1 include only strong preferences over the alternatives. They do not include expressions of indifference between the alternative models.

Table 5.1 shows that 14% of respondents to the survey (or 317 voters) have preferences of type 1 (i.e. they most prefer P, next prefer D and prefer S least), 3% of respondents are of type 2 and so on.[7] A large number of respondents (24%) also fall into the 'missing or invalid' category, largely because they answered 'don't know' or failed to answer one, or both, questions about their preferences. So, for instance, nearly a third of this group left both questions blank or answered 'don't know' to both. Another third marked their first preference as D and their second preference as unknown or missing. As well, over 15% of the 'missing' group gave their first preference as S and left their second preference unanswered. This fact complicates the analysis slightly, but the results regarding the existence of cycles are not influenced by the decisions of these voters.

Notice that 41% of respondents to the survey most prefer the direct election model, making D a plurality winner against S and P.[8] Furthermore, assuming that citizens vote in strict accordance with their preferences[9], a competition between the status quo and the direct election model would deliver D support from voters with preferences of types 1, 5 and 6 (i.e. 1259 votes). This compares favourably with the 486 votes that S could expect from people with preferences of types 2, 3 and 4. The figures for a competition between D and P are similar (1270 to D from person types 3, 5 and 6 compared to 475 for P from person types 1, 2 and 4). If these figures are taken as being representative of larger trends, then the direct election option could be expected to gain more than double the votes accorded to the alternatives. Because this lead is so strong, it is clear, even without any knowledge of the way that the missing 566 respondents might vote, that D would beat both alternatives. That is, while the decisions of 566 missing respondents might influence the overall ranking of the status quo and the president appointed by two-thirds of parliament model, even if all of these people voted against direct election, the direct election model would win. As such, the Australian

[7] These figures are rounded to the nearest percentage point.
[8] When the missing cases are excluded, this figure jumps to 53.6%.
[9] Examination of the survey shows that 88% of respondents who answered all relevant questions voted in accordance with their preferences. The appendix examines the characteristics of respondents who did not vote in line with their stated preferences.

Constitutional Referendum Survey data indicates that direct election is a clear winner and that there is no cycle on the republic issue.[10]

5.4 Are Preferences Single-Peaked?

It is clear from the preceding discussion that whether or not there is a preference cycle depends on the structure of individual preferences. In fact, as discussed in chapter 4's investigation of the median voter theorem, rational choice theory shows that if preferences are single-peaked, then stable group decisions over a single issue are assured (Mueller [1989] 1993, 65-66). This section reviews the definition of single-peaked preferences and tests whether preferences over the republic issue have this property.

Underlying single-peakedness is the assumption that citizens share common perceptions over the way that alternatives are arrayed along a single dimension. For instance, we might suppose that everyone agrees that the status quo involves no constitutional change, the president appointed by two-thirds of parliament model involves moderate change and the direct election model involves radical change. If there is agreement that this view of the issue makes sense, then we can order these constitutional options along a single-issue dimension, as in figure 5.1. If, in addition, citizens prefer options that are closer to their ideal over those that are further away, then citizens have single-peaked preferences. From figure 5.1, it is clear that preferences of the form (S>P>D), (P>D>S), (P>S>D) and (D>P>S) are single-peaked over this issue dimension. Individuals with these preferences prefer alternatives that are closer to their favourite option over alternatives that are more distant. Preferences of the form (D>S>P) are not single-peaked because the status quo is preferred over the president appointed by two-thirds of parliament model even though the latter is 'closer' than the former to the voter's favoured option (direct election). Similarly, preferences of the form (S>D>P) are not

[10] The figures from table 5.1 indicate that more respondents prefer P to S, clearly the reverse of the result at the referendum. Because of the large number of missing answers, however, we should not be too quick to suggest that the survey is unrepresentative in this respect. In fact, S gained 23.8% of survey respondents' first preferences, compared to 20.1% to P and 53.6% to D, a result that is consistent with the republic result.

single-peaked because D is preferred over P, even though P is 'closer' to S than is D.

Figure 5.1: Preferences on the (S, P, D) Dimension

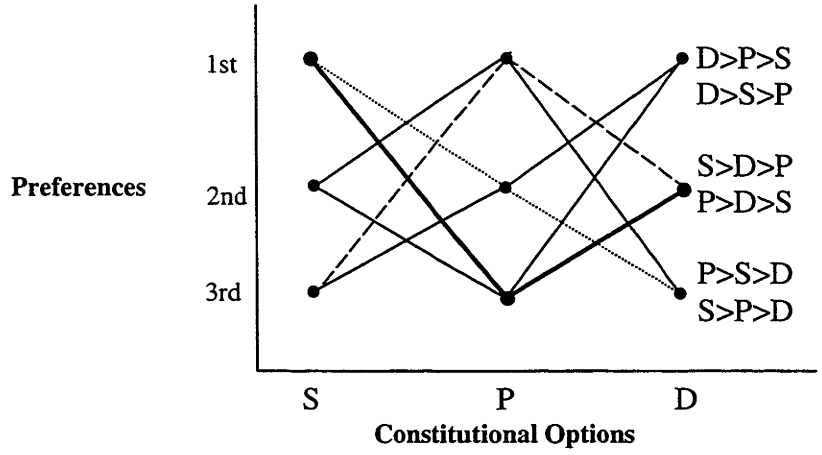
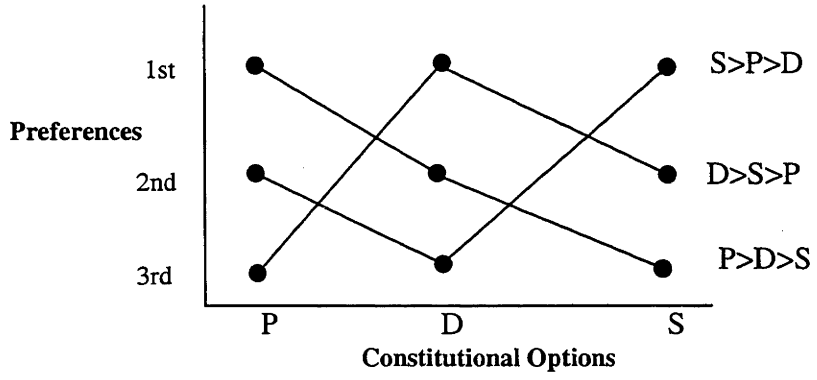


Figure 5.1 provides one way of representing the republic issue. With three constitutional options, however, there are two other ways to represent the republic debate, where each of these issue dimensions is distinguished by its 'middle' option. Importantly, none of these representations necessarily corresponds with actual political debate. Instead, these dimensions simply represent different ways that the debate *might* be represented. It is also because these dimensions do not necessarily have a substantive political meaning that being on the 'left' or the 'right' makes no difference in these formulations. As such, the issue dimension (S, P, D) graphed in figure 5.1, is the same as the issue dimension (D, P, S). The other possible issue dimensions are: (P, D, S), which is the same as (S, D, P) and (D, S, P), which is the same as (P, S, D). On this basis, there are six preference orderings (listed in table 5.1) over *three issue dimensions.*

For each dimension, four of the six possible preference rankings from table 5.1 will necessarily be single-peaked. We have seen that this is the case for the (S, P, D) dimension. Figure 5.2 shows that this is also the case for the (P, D, S) dimension. In that case, preferences (D>S>P) and (P>D>S) are single-peaked. Although not represented in figure 5.2, symmetry ensures that the preference relations (D>P>S) and (S>D>P) are also single-peaked over this dimension. Individuals with all of these preferences prefer options closer to their favourite over options that are further away. Preferences of the form (S>P>D) are not

single-peaked along this dimension because P is preferred over D, even though D is 'closer' (on this dimension) to the favourite outcome (S). Symmetry ensures that the same logic applies to the preference ordering (P>S>D).

Figure 5.2: Preferences on the (P,D,S) dimension



The simple fact that there are three alternative constitutional models ensures that the preferences of four out of six person types will be single-peaked on any given dimension. If single-peakedness is *not* an underlying feature of the group's preferences, e.g. if individual preferences are randomly distributed among the person types, then on average, two-thirds of respondent preferences will be single-peaked on any given dimension. As a consequence, to be convinced that one of these dimensions has greater salience than the others, we need to see that substantially more than two-thirds of preferences are single-peaked with respect to a particular issue dimension.

In fact, 91% of preferences in the data set *are* single-peaked along the (P,D,S) dimension (the dimension depicted in figure 5.2). This figure is significantly larger than 66%, providing evidence that preferences over the republic issue *are* single-peaked. The veracity of this result is partly confirmed by table 5.1. That table shows that very few respondents have preferences that are not single-peaked along the (P,D,S) dimension, i.e. only types 4 and 2, with fewer than 4% of respondents each, have non-single-peaked preferences along the (P,D,S) dimension.

While there is no obvious political interpretation of (P,D,S), this issue dimension might reflect a judgement by voters on the degree to which each of these options are perceived as being 'elite-driven'. That is, perhaps the president appointed by two-thirds of parliament model is perceived by a majority of voters as being more 'elitist' than the direct election model and the status quo. This suggestion is partially supported by opinion polls showing support for the 'Yes' vote was highest among households with high incomes and lowest in the poorest households (Morgan Poll 1999a). Whether respondents actually understood the republic issue in these terms or whether they attributed some other meaning to this issue dimension, it is clear, at the very least, that we can sensibly model voter preferences over the republic issue *as if* voters held these views. That is, whether voters thought about the choice in these terms, their stated preferences are well-captured by the assumption that they viewed the issue in this way.

This result is also consistent with findings from List, McLean, Fishkin and Luskin (2000) on the Australian Deliberative Poll, held between October 22 and October 24, 1999 on this issue. This chapter confirms their argument that, without deliberation, there is a single salient issue dimension along which preferences over the republic are single-peaked. As with the Australian Constitutional Referendum Survey, this dimension represents the status quo and the president appointed by two-thirds of parliament model as being at the *extremes* of the dimension and the direct election model as being in the centre.

5.5 Speculation

Three interesting lines of speculation follow from the observation that preferences are single-peaked along (P,D,S). First, there is good reason to describe the direct election option as, in the terms developed in the preceding chapter, an optimal compromise on the republic issue. That is, given the nature of voter preferences at the moment, the direct election option maximises benefits and minimises costs to the largest number of voters.

Second, it is clear that the view captured in the (P,D,S) dimension is substantially different from the view held by supporters of the 'Yes' camp. That is, members

of the 'Yes' campaign promoted the parliament appointed model partly on the basis that it appeared to represent minimal change, rather than the radical change associated with the directly elected model (e.g. Craven 1999; Lavarch 1998; Pyne 1999, 34;Turnbull 1999, 3-4). This sentiment is clear in Robb's (1999) statement that "It [a 'Yes' vote for the proposed model] could also be viewed as the moderate course between the extremes of conservative monarchism and radical republicanism".

In the terminology used in this chapter, Robb's argument translates to the view that the referendum issue is best expressed along the (D,P,S) dimension. In other words, the president appointed by two-thirds of parliament model is the 'middle' or moderate option and S and D are the extreme options for Robb and other 'Yes' campaigners. The results from the Australian Constitutional Referendum Survey suggest that most respondents did not share this view of the republic issue. Instead, the evidence suggests that respondents, including many supporters of the president appointed by two-thirds of parliament model, saw the direct election model as being moderate and the other options as being extreme. This difference suggests that part of the reason for the loss of the referendum might have been the 'Yes' campaign's picture of the republic debate.[11]

The third line of speculation again links with conclusions by List et al (2000) on the deliberative poll data. They show that while preferences before and after the deliberative poll were largely single-peaked, the dimension along which preferences were structured in this way *changed* after deliberation. That is, List et al show that preferences were single-peaked along the (P,D,S) dimension before deliberation and single-peaked along the (S,P,D) dimension after deliberation (2000, 8-9). They suggest that the process of deliberation shifted preferences over the relative merits of the options and, more importantly, the way in which the options were viewed. After deliberation, more people preferred P and more people saw P, rather than D, as being the 'moderate' option. Given this, we might suppose that the view taken by a majority at the Deliberative Poll in October 1999

[11] We might also speculate that the Constitutional Convention made a serious mistake in setting the parliament appointed model, rather than a direct election model, against the status quo (Galligan 1998, 17). Opinion polls at the time and surveys since have all suggested that direct election is a clear majority winner.

and at the Constitutional Convention in February 1998 shows that participants at the Poll and the Convention engaged in serious deliberation. In this way, the third supposition suggests that the failure of the president appointed by two-thirds of parliament model amounts to failed deliberation among the wider community, rather than failed campaigning by 'Yes' supporters (Turnbull 1999, 249; Uhr 2000, 206).

These lines of speculation are not necessarily mutually exclusive. Instead, it is possible that members of the Constitutional Convention engaged in deliberation before choosing the president appointed by two-thirds of parliament model and that participants at the Constitutional Convention and within the 'Yes' campaign misjudged their ability to alter community views of the issue.

Neither of these lines of speculation is new. The larger point of this discussion is, however, that the finding that preferences are single-peaked over the republic issue forms the common core of these explanations. That is, it might be the case that the referendum failed not just because, as has been suggested, the 'Yes' side campaigned badly, but *because* the 'Yes' side misjudged the underlying structure of the debate. Similarly, increased public deliberation might have altered the result not just because it might have increased public support for the proposed model, but *because* deliberation sometimes changes the ways in which people view different options. In this way, the observation that preferences are single-peaked does more than simply provide support to existing explanations of the referendum result. In addition, the result deserves attention because, as the previous discussion shows, the finding suggests how apparently unrelated explanations might be underpinned by the same explanatory factor.

5.6 Conclusion: What Can Rational Choice Theory Add to the Study of the 1999 Republic Referendum?

As with earlier chapters, in asking 'what can rational choice theory add to the study of the republic referendum?' this chapter also answers the question 'what can the study of the republic referendum add to rational choice theory?' In fact, the study of the republic referendum contributes part of the answer to the long-running rational choice investigation into the question 'why so much stability?' The answer in this case is simply that preferences themselves are structured in such a way as to prevent policy cycling.

The answer to the first question is more involved. Rational choice theory makes three different contributions to the understanding of the republic referendum. First, the logic of rational choice theory shows that the conundrum highlighted at the beginning of this chapter is not explicable in terms of a preference cycle. Instead, the evidence suggests that the direct election option is majority preferred over both the status quo and the president appointed by two-thirds of parliament model. As such, the survey data indicates that the direct election model is more likely than the parliament appointed model to succeed in any future referendum against the status quo.[12]

Second, and more importantly, this chapter shows that at least part of the reason *why* the direct election model is so widely supported is attributable to the dominant view of the republic issue, held by opponents and supporters alike, that the direct election option represents a more 'moderate' choice than either of the alternatives. This view contrasts with the salient dimension highlighted by 'Yes' supporters and suggests reasons why 'Yes' supporters may have had difficulty in their campaigning. The apparent view of the republic issue also provides room for further speculation on the role of deliberation in public debates of this form.

[12] Of course, survey data is of limited use in either determining the nature of future referendum campaigns or the ways in which preferences might change in response to such campaigns. All that can be said is that, given the data available, the direct election option is currently a Condorcet winner.

Specifically, these, and other, findings suggest that deliberation may have had a role in changing preferences over alternatives and, more importantly, changing public views of the alternatives on offer.

The preceding discussion hints at the deepest contribution made by rational choice theory to the study of the republic referendum. That is, the approach provides a framework for understanding how ostensibly unrelated questions and explanations sometimes fit together. In this case, rational choice theory makes clear both how questions relating to phenomena as different as preference cycling, deliberation and agenda manipulation fit together, and how explanations emphasising failed deliberation and failed campaigning are connected by the same explanatory factor.

Appendix: Strategic Voting at the 1999 Republic Referendum

All of the preceding analysis is based on the assumption that citizens vote sincerely, where this means that voters cast their ballots in strict accordance with their preferences and do not consider options other than those on the ballot paper. As discussed in chapter 1, this is a common assumption. Spatial theories of voting often assume sincere voting in large elections for the simple reason that individual ballots are unlikely to be decisive in these contests and hence, the effort required to engage in strategic considerations is likely to be wasted (Enelow and Hinich 1990, 2). In contrast, theorists studying decision-making in committees often assume that behaviour is motivated by strategic considerations because individual decisions are more likely to be decisive.

At the same time, following Gibbard (1973) and Satterthwaite's (1975) extensions of Arrow's impossibility theorem, spatial theorists recognise that "...the incentives to vote strategically [can] arise in any minimally democratic voting system" (Cox 1997, 11). As with Arrow's theorem, Gibbard and Satterthwaite's conclusions should *not* be understood as implying that we should expect strategic voting in all elections. Instead, the result indicates that, for every minimally democratic institution or procedure, there exists some preference ranking that is able to be manipulated by strategic voting, to the benefit of at least one voter (Ordeshook 1986, 87-88).

These findings show that the *potential* for individually beneficial strategic voting exists in mass elections and in committees. In fact, the possibility of strategic voting in committees has already been raised in this chapter in a slightly different form. McKelvey's conclusions on the possibility of agenda manipulation are closely related to Gibbard and Satterthwaite's findings. McKelvey's result - if there is the potential for a preference cycle, then an actor with control over the agenda can manipulate the order of voting so as to lead the committee by a series of pairwise votes to any policy position - simply provides a more narrowly-focused application of Gibbard and Satterthwaite's conclusions.

In Australian politics, the possibility of strategic voting within a medium-sized decision-making body was raised by members of Australians for Constitutional Monarchy at the 1999 Constitutional Convention. Members discussed the pros and cons of voting for the republican model they least supported on the basis that it would be unlikely to succeed at the referendum (Nathan 1998, 24). In spite of this discussion, however, it seems that most constitutional monarchists abstained from voting on the form of the republic model and, as a result, did not seek to manipulate the vote on this question (Pearson 1998, 27).

The rationale for strategic voting in this example is straightforward - by initially voting for a less favourable option, individuals can increase the chances of the success of their favoured option. The rationale for strategic voting in mass elections is sometimes more difficult to determine. That is, while Gibbard and Satterthwaite's theorems show that no voting system is immune from the possibility of strategic voting, social choice theory does not predict widespread strategic voting in mass elections. One example where strategic voting in mass elections is easily understood involves a community scheme to collect sufficient money to provide a public good, where payment for the good is in proportion to each person's reported valuation. Under this scenario, an individual might rationally under-report the value s/he attaches to the provision of the good because, in a reasonably large community, the likelihood that any individual's donation will prove decisive is trivially small. Strategic voting may be rational in this situation because individuals can directly benefit from such action. This is not the case in most general elections.

Whatever the theory on this topic, however, it is clear that significant numbers of voters do cast strategic ballots, even when the chance that their vote will prove decisive is trivially small (Bean and Wattenberg 1998; Bowler and Denemark 1993; Cox 1997, 30; Evans, Curtice and Norris 1998). More interesting than this empirical observation is that fact that many of these votes appear to be motivated by strategic concerns. That is, they are deliberate voting decisions, not 'mistakes'. As such, even though rational choice theory has difficulty explaining

why voters might cast strategic ballots in large elections, the observation that voters are engaged in such strategic behaviour warrants further investigation.

This appendix has two aims. First, it establishes whether there was any strategic voting in the republic referendum and if so, the extent of such voting. Second, it determines the nature of strategic considerations in the republic referendum.

In fulfilling these aims, this appendix starts by matching respondent answers to questions relating to preferences over the three constitutional models on offer with their answers to a question that elicits their voting decision at the referendum. Table 5.2 classifies the 10% of respondents whose preferences were inconsistent with their vote by person types. As is clear from table 5.2, 78% of these inconsistent voters claim that their first preference is for the direct election model. Overall, 18% of direct electionists claim to have cast ballots that were inconsistent with their preferences.

Table 5.2: Strategic Voting Across Person Types[13]

Voter types	**1**	**2**	**3**	**4**	**5**	**6**
First Preference	P	P	S	S	D	D
Second Preference	D	S	D	P	P	S
Third Preference	S	D	P	D	S	P
% strategic votes[14]	6% (14)	9% (21)	4% (10)	2% (4)	40% (88)	38% (85)

[13] Note that non-consistent voters make up 10% of respondents.
[14] This is the percentage of strategic votes as a proportion of the total number of inconsistent votes.

There are, of course, a number of explanations for such voting behaviour. One obvious explanation is that people who vote in these ways are somehow mistaken. This reasoning makes some sense. It is likely that some people do mistakenly or mischievously fill in surveys. At the same time, if this reasoning explains all strategic voting, we should expect that the proportion of 'mistaken' voters would be roughly equal across person types. Clearly, this is not the pattern we see in the survey.

Instead, table 5.2 makes clear that few non-direct election supporters voted in a way contrary to their preferences. As such, while the mistaken voter hypothesis might explain the voting behaviour of some non-direct electionists, the concentration of strategic votes among person types 5 and 6 means that it is prudent to examine possible rationales for their voting behaviour and, specifically, to look at explanations other than the mistaken voter hypothesis. The hypothesis developed here is that the trend among some D voters to vote for their third over their second preference is partly explained by the success of advertising campaigns waged by the Australian Republican Movement (ARM) and the Australians for Constitutional Monarchy (ACM). On one side, the logic of this argument is as follows: when faced with the choice between P and S, significant numbers of type 4 voters (D>P>S) voted for the status quo because they believed ACM claims that they would have little chance of achieving a direct election model if the president appointed by two-thirds of parliament model were accepted (e.g. Grubel, 29/9/1999). On the other side, direct election supporters who ranked the status quo over the parliament appointed model may have voted for the latter because they accepted the ARM line that constitutional change in Australia is best conducted in a series of small changes (e.g. 'Beazley Commits to Another Referendum if Elected' *AAP News Service*, 1/11/1999).

The hypothesis that direct election supporters who voted for their third over their second preference did so because of beliefs regarding the likelihood of further constitutional change is supported by further data in the survey. When asked whether they agreed or disagreed with the statement " [under the proposed change to a Republic]...further constitutional reform would become more difficult", only 3% of consistent type 5 respondents (voters with preferences D>P>S who voted

for P in the referendum) agreed or strongly agreed with the statement. Of the type 5 strategic voters (prefer D>P>S, voted for S), 15% agreed or strongly agreed that further constitutional change would become more difficult. These results are given in table 5.3.

Table 5.3:Views of type 5 voters when asked whether they agree or disagree with the statement " [under the proposed change to a Republic]...further constitutional reform would become more difficult"[15]

	Type 5 Consistent Voters	Type 5 Strategic Voters
Strongly agree or agree	3%	15%
Neither agree nor disagree	21%	30%
Strongly disagree or disagree	73%	55%

While roughly equal numbers of voter types say they neither agree nor disagree with this statement, consistent voters (prefer D>P>S, voted for P) are much more likely to say they strongly disagree or disagree with the idea that further constitutional change will be more difficult if P is successful. Consistent voters are also less likely to say they strongly agree or agree with the statement that further change will be difficult if P is successful. This means that the type 5 people who voted according to their preferences are much more certain than other type 5 voters that P's success would not reduce the likelihood of further constitutional change.

Interestingly, the same type of relationship between consistent and strategic type 6 voters exists. In this case, type 6 consistent voters (D>S>P, vote for S) are more likely than strategic type 6 voters (D>S>P, voted for P) to agree or strongly agree

[15] The figures in tables 5.3 and 5.4 do not add to 100% because respondents who did not answer this question are not listed in these tables. In all cases, however, between 1% and 4% of respondents failed to answer the question.

with the statement that constitutional change will be more difficult if P is successful. Type 6 views on the likelihood of further constitutional reform are represented in table 5.4.

Table 5.4: Views of type 6 voters when asked whether they agree or disagree with the statement " [under the proposed change to a Republic]...further constitutional reform would become more difficult"

	Type 6 Consistent Voters	Type 6 Strategic Voters
Strongly agree or agree	31%	13%
Neither agree nor disagree	34%	35%
Strongly disagree or disagree	33%	49%

Table 5.4 shows that just under half of all strategic type 6 voters (those who prefer D>S>P and vote for P) disagree or strongly disagree with the statement that constitutional reform will be more difficult if P is successful. This compares to 33% of consistent voters who share this view. Strategic type 6 voters are also less likely to agree or strongly agree that constitutional change will be more difficult if P is successful.

These figures provide confirmation to two arguments. Firstly, when faced with a choice between their second and third preferences, 18% of direct election supporters voted for their third preference. Secondly, they did so for strategic reasons. That is, these figures show that significant numbers of direct election supporters voted against their preferences because of their beliefs about the likelihood of further constitutional change. In other words, these strategic voters took account both of their immediate choices and of the second round effects of these choices.

While strategic voting has a potentially significant role in any election, its impact in the referendum was lessened by the fact that roughly equal numbers of direct electionists in each person type (5 and 6) voted against their preferences. As a result, the strategic votes of direct electionists cancel each other out, so that the overall impact of strategic voting was probably insignificant. That equal numbers of respondents in person types 5 and 6 voted strategically also means that the earlier conclusion on the non-existence of a preference cycle is left unchanged.

CONCLUSION: WHAT CAN RATIONAL CHOICE THEORY ADD TO THE STUDY OF AUSTRALIAN POLITICS?

This thesis has examined three highly significant issues in contemporary Australian politics. These are: increased policy activism by small parties and Independents in the Senate; the rise of Pauline Hanson's One Nation in the 1998 Queensland state election; and the 1999 republic referendum. What is distinctive about the examination in this thesis, however, is that it has been framed in terms of the core findings from rational choice theory. This chapter summarises the benefits, limitations and lessons apparent in these case studies and, in doing so, assesses the contributions that we might expect from the increased use of rational choice theory in the study of Australian politics.

Before summarising these results, however, this chapter reviews the rationale and findings from the first two chapters. Both outline the characteristics, key findings and recent developments in rational choice theory. Importantly, chapters 1 and 2 also explicitly respond to a number of criticisms that have been directed against rational choice theory. In doing so, the first two chapters prepare the ground for the remainder of the thesis by questioning the current low usage of rational choice theory in the study of Australian politics.

With this point established, the next three chapters show, by appeal to original examples, the types of insights that rational choice theory can bring to the study of Australian politics. One of the general lessons from these case studies is that it is not sufficient for Australian political scientists with an interest in rational choice theory to import conclusions and explanations from rational choice theorists in the US and UK. Instead, there is a need to apply rational choice techniques and logic to Australia's distinctive political conditions. That is, it is only by doing some

rational choice theory ourselves that we can gain an insight into what is most valuable in the approach.

For example, the analysis in chapter 3 uses spatial theories of voting to examine the results of the 1998 Queensland state election and to focus on a central question in the subsequent debate over One Nation's success. Rather than ask how voter preferences changed in the period preceding One Nation's rapid electoral success, however, chapter 3 assumes that voter preferences are fixed and asks, instead, if the facts of the election can be explained simply by One Nation's entry on to the Queensland electoral scene. As such, the chapter begins, as is common in rational choice theory, by turning a standard question on its head.

In the end, four conclusions about the election result are outlined. First, the chapter concludes that the change in seats at the 1998 Queensland election was entirely consistent with Hanson's claim that One Nation gained support from voters previously ignored by the mainstream parties. This conclusion does not establish that voters actually held unchanged preferences between the 1995 and 1998 elections, but that the change in seats that occurred at the election can in principle be explained solely in terms of One Nation's entry. As such, the chapter demonstrates that Hanson's claims about the new party's electoral successes can not be dismissed out of hand. Second, the chapter makes evident that competition at the election must have occurred along at least two issue dimensions. This conclusion follows from the finding that a single dimensional model of the election compels the acceptance of two intuitively implausible implications. That is, in order to represent the change in seats that actually occurred at the election along a single issue, it is logically necessary to accept the conclusions that One Nation was *not* an extremist party and that the Liberals and Nationals occupied opposing policy positions along the issue dimension. In order to reject these implications, the chapter argues, it is also necessary to reject all single dimensional accounts of the election. In turn, this rejection casts doubt on other explanations of One Nation's rise, especially accounts that emphasise the overriding importance of race as an issue. The chapter argues that while issues relating to race may well have played a significant role in the election, they did not play an exclusive role.

The third and fourth conclusions in chapter 3 refer to the policies adopted by parties at the election. The analysis does not reach a conclusion on the exact nature of the issues at play, but does conclude that we can sensibly represent the change in seats that occurred at the election in a model of party competition over two issue dimensions. In doing so, the logic of the model compels acceptance of two conclusions: that the Queensland Liberals must have been, among all the parties, least like One Nation in policy terms and; that the Queensland ALP must have occupied a similar policy position to One Nation on one of the two issue dimensions.

Overall, this chapter highlights, by example, the force of deductive logic in many rational choice explanations. That is, the model developed in the way that it did because of the structure imposed by the facts of the election and the logic of spatial theories of voting. The chapter also shows that because deductive logic provides structure, it is potentially very valuable in environments, such as this one, where there are few facts available and the analyst must extract all the implications that follow from the information that *is* available.

Chapter 4 deals with issues relating to policy interaction between parties in the Australian Parliament and, as such, has a different focus from chapter 3. In particular, my discussion of Australian bicameralism consciously abstracts from the details of specific election results. Instead, while the chapter asks standard questions about how the Senate and House of Representatives might interact over policies, the reasoning in chapter 4 attempts to answer these questions in a distinctively general way. The chapter begins by developing a normative argument in favour of centrist, rather than extremist, policy positions. The argument, briefly, is that centrist results typically minimise the costs associated with collective provision of goods and services and often have the status of 'most preferred policy'. It is for this reason that centrist results deserve to be described as policies of 'optimal compromise'.

The second, and larger half, of the chapter asks whether policy negotiations in Australia's bicameral parliament are likely to deliver policies that approximate the

optimal compromise. The analysis answers this question by developing an explanatory model of party interaction over policy that is based on the median voter theorem.

The chapter concludes that whether Australian bicameralism is likely, in general, to deliver policies that are close to the optimal compromise depends on whether the major parties in the House of Representatives and Senate are likely to converge at centrist policy positions. That is, if, as predicted by the median voter theorem, the major parties in the parliament occupy similar centrist policies, then the negotiations typically involved in Australian bicameralism may well draw policy outcomes away from the optimal compromise, relative to the outcomes we could expect from the House of Representatives as a solitary policy actor. If, on the other hand, the major parties occupy distinct policy positions, perhaps because of voter alienation, the threat of entry by a third party or pre-selection contests, then the assessment of policy interaction in the parliament is quite different. In this scenario, we should expect that the effect of policy bargains between the House of Representatives and the Senate will be to draw policy outcomes closer to the optimal compromise than would be expected if the House of Representatives were to determine policy by itself.

Chapter 5 offers an examination of the 1999 republic referendum that also makes use of the concept of an optimal compromise between competing interests. The discussion in that chapter is motivated by a fairly common question in rational choice theory - is there a preference cycle? The analysis uses survey data to investigate whether this question sheds light on the referendum result and concludes that while there is no cycle, rational choice theory suggests something else that is interesting about citizen preferences over the republic issue. Specifically, the analysis suggests that most preferences are single-peaked over the issue dimension (P,D,S). This means that if the preferences of respondents are graphed over this dimension, then individuals prefer alternatives that are closer to their ideal point over alternatives that are further away from their ideal point. From this observation, we can infer that most survey respondents share the view (or at least that we can represent their preferences *as if* they share the view) that the direct election option is 'moderate' and that the status quo and president

appointed by two-thirds of parliament models are 'extreme' alternatives. This observation is noteworthy, because it suggests that the direct election option may be an 'optimal compromise' over the republic issue.

The apparent structure of voter preferences over this issue is also interesting because it conflicts with the view of the issue that was expressed by 'yes' campaigners. In contrast to the survey results, comments from 'yes' supporters suggest that they saw the parliament appointed model as being the moderate option and the status quo and direct election options as being extreme alternatives.

The investigation of the structure of preferences over the republic issue also raises the suggestion that the referendum result might reflect a lack of deliberation by Australian voters. The deliberative poll data (List, McLean, Fishkin and Luskin, 2000) shows that prior to deliberation, participants at the poll had single-peaked preferences over (P,D,S) - as in the Australian Constitutional Referendum Survey. After deliberation, however, the preferences of voters were single-peaked over the issue dimension (S,P,D), i.e. the proposed model was perceived as being 'moderate'. If this data, collected in the lead-up to the referendum, is indicative of general trends, then we can expect that voters may have changed their view of the structure of the issue if there had been significant deliberation on the issue.

Perhaps more interesting than these different lines of speculation is the suggestion, advanced in chapter 5, that these speculative remarks are underpinned by a common explanatory factor. That is, it might be the case that the referendum failed not just because, as has been suggested elsewhere, the 'Yes' side campaigned badly, but *because* campaigners misjudged the underlying structure of preferences over the issue. In other words, their campaign might have been hindered by the fact that 'yes' campaigners implicitly judged that views were single-peaked on the issue dimension (S,P,D), rather than (P,D,S). Similarly, increased public deliberation might have altered the result not just because it might have increased public support for the proposed model, as suggested by the deliberative poll, but *because* deliberation sometimes changes the way that people view particular debates. Under this account of the republic issue, the observation

that preferences are single-peaked shows how these apparently unrelated observations might be underpinned by the same explanatory factor.

While there is no guarantee that rational choice theory will provide particular contributions in the study of topics of interest, together, these case studies suggest that the approach can provide three different types of benefits. In short, these amount to novel questions, novel explanations and novel emphases. Each of these benefits is discussed in turn below.

Novel Questions

The major bonus of novel questions is that they typically encourage us to reconsider our understandings of topics that are otherwise widely held to be thoroughly well-known and understood. By itself, this process is likely to bring new emphasis and explanations to the study of the topic. That rational choice theory may be the source of a series of novel questions is perhaps most apparent in chapter 5. That chapter raised two lines of questioning, i.e. the possibility of preference cycling and changes in public perceptions of the issue, that had previously received little or no explicit attention in Australian political science.

In doing so, the chapter also makes clear the benefits of seeing rational choice concepts and techniques as part of a tool box for study in political science. Following this metaphor, we should expect that different tools will prove themselves valuable in dealing with different problems. Accordingly, we should be unconcerned if we find one tool unsuitable for a particular job, as long as there are other, more suitable, tools available. In terms of the conclusions from chapter 5, this point is apparent in the fact that while the chapter 'failed' to find a cycle over the republic issue, the inquiry was valuable because it provided the inspiration for questions relating to the structure of preferences.

Along with chapter 4, chapter 5 also shows how an *understanding of Australian politics* might add to rational choice theory. In that chapter, the examination of Australian circumstances provides another example to support the argument that rational choice concerns over the potential for policy cycling and agenda

manipulation in real-world legislatures might be over-emphasised (Grofman 1993, 1551-1553). Instead, the republic referendum shows that the views of citizens might tend to share a common form that limits the potential for preference cycles. Similarly, chapter 4 shows that Australian institutional factors, like party discipline and the differing electoral systems used in each chamber of the Australian parliament, have stability-inducing properties.

Novel Emphases

While rational choice theory does not always produce new questions, the approach does explicitly abstract from political detail and, in doing so, typically delivers assessments of political events with a distinctive emphasis. Sometimes, as in chapter 4, this emphasis is the direct result of attempts to draw out general tendencies in the phenomena under study. More often, rational choice theory's distinctive emphasis results from attempts to model political phenomena in a deductive manner. The potential benefits associated with this approach are clear - deductive logic provides rational choice theorists with a grammar of argument. That is, it provides theorists with a clear structure for the assessment of different arguments and also suggests how theory development might proceed.

Sometimes, rational choice theory's novel emphasis amounts to no more than the re-description of existing explanations in terms of rational choice concepts. Such re-description is nonetheless valuable, partly because, as with the introduction of new questions to a familiar topic of study, new emphasis might draw attention to unnoticed elements of the explanation. Importantly, re-description also places the new topic within the greater structure of existing rational choice explanations and thus raises the possibility that we might notice relationships that were previously overlooked.

Even if re-description draws out the links between political phenomena, however, there is no guarantee that new emphasis will prove insightful. Still, if rational choice theory's emphasis does prove convincing then we might gain access to a new way to analyse and assess political phenomena. This point is perhaps clearest in chapter 4's study of policy interaction between the Senate and House of

Representatives. If the models and arguments developed in that chapter are convincing, then they suggest a new way to think about and assess policy bargaining in the Australian parliament. In addition, because the argument is quite general, the approach can be readily applied to the study of policy bargaining in parliaments both inside and outside Australia.

Rational choice theory's distinctive emphasis also has a downside. Because the theory abstracts from detail in order to highlight general tendencies, the theory is unlikely to yield either detailed explanations or accurate predictions of particular political events.

While it is important to recognise this drawback, the larger lesson is that rational choice explanations complement, rather than replace, existing empirically detailed accounts of politics. The relevance of this lesson is apparent, for example, in chapter 3's study of the 1998 Queensland state election and the examination of strategic voting developed in the appendix of chapter 5. Both of these studies clearly miss factors that are important in explaining the relevant outcomes. For instance, chapter 3's examination of One Nation's rise includes no discussion of Hanson's personal appeal to the electorate - a factor that may well have been crucial. The discussion of strategic voting contained in the appendix to chapter 5 is similarly limited. As the discussion makes clear, accounts from outside rational choice theory might have more success in explaining *why* individuals would choose to vote strategically in general elections. While rational choice theory has difficulty explaining why individuals might vote strategically and why Hanson has such personal appeal, the theory remains useful. In these examples, the approach is used as a means to explore, in chapter 3, one of Hanson's own claims about the election and, in chapter 5, the form that strategic voting took in the referendum. The result is that rational choice theory sometimes provides insights into elements of political behavior even when it is insufficient to explain the behaviour completely.

Novel Explanations

That the rational choice approach delivers novel explanations is clear in all three case studies. For instance, while chapter 3 does not ask distinctively new questions about the 1998 Queensland state election, it does produce novel emphasis and explanations. Perhaps the most interesting conclusion from chapter 3 is that Hanson might have been right in her claim that One Nation's dramatic increase in seats resulted not because of any preference change, but because the party offered a favourable issue stance to voters who were previously poorly represented.

Two limitations that are typical of rational choice theory more generally are apparent in the account developed in chapter 3. One of these limitations has already been mentioned. Most practitioners will admit that rational choice theory has less than universal applicability. In itself, this admission may reflect no more than a recognition by analysts that it is more difficult to develop genuinely universal social scientific laws than previously thought. In this regard, rational choice theory is no more limited than any other theory in the social sciences.

The second limitation, especially apparent in chapters 3 and 4, centres on the need for further empirical investigation. Until such research is undertaken, the implications developed in these chapters will remain interesting lines of speculation. This admission goes to the heart of Green and Shapiro's criticisms about rational choice theory. As they see it, rational choice theory typically proceeds with model building without conducting any empirical work. On this point, it is clear they are right to rank new explanations with empirical evidence, perhaps as in chapter 5, as being more valuable than work that has not yet been empirically verified. Acceptance of this reasoning does not necessitate, however, acceptance of Green and Shapiro's conclusions. Instead, while work without empirical support merits some caution, such caution does not outweigh the benefits already mentioned.

The previous comment deserves extra emphasis. While the case studies presented here, and rational choice theory more generally, are characterised by various limitations, the benefits associated with the approach, seem to me to outweigh these costs. The most obvious benefit associated with rational choice theory is that the approach sometimes draws attention to, and helps make sense of, non-obvious relationships in politics. Rational choice theory typically does not provide the whole explanation of any phenomenon, but without rational choice theory, particular elements of the explanation will be ignored or left to intuition. As such, the general claim of this thesis is that rational choice theory provides an extensive repertoire of novel questions, emphases and explanations of political phenomena that is still largely untapped in the Australian setting.

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